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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE)	
APPLICATION OF ROCKY)	CASE NO. PAC-E-14-08
MOUNTAIN POWER FOR)	
AUTHORITY TO CANCEL)	Testimony of Kathryn C. Hymas
ELECTRIC SERVICE SCHEDULES)	
115, 125, AND 155 AND REPLACE)	
WITH NEW SCHEDULE 140 WITH		
CHANGES.		

ROCKY MOUNTAIN POWER

CASE NO. PAC-E-14-08

August 2014

1 **Introduction**

2 **Q. Please state your name and business address.**

3 A. My name is Kathryn C. Hymas, and my business address is 201 South Main,
4 Suite 2400, Salt Lake City, Utah 84111.

5 **Q. By whom are you employed and in what position?**

6 A. I am currently employed as the Vice President of Rocky Mountain Power Finance
7 and Demand-Side Management ("DSM") for PacifiCorp dba Rocky Mountain
8 Power ("the Company").

9 **Q. Please describe the responsibilities of your current position.**

10 A. I am responsible for demand-side management for Rocky Mountain Power and
11 for Pacific Power. This includes, the planning, development, design, approval and
12 implementation of programs designed to reduce energy consumption through
13 energy efficiency and behavioral changes and to reduce consumption during peak
14 periods of usage through load control. I am also responsible for finance functions
15 for Rocky Mountain Power.

16 **Qualifications**

17 **Q. Please describe your background.**

18 A. I received a Master of Accountancy from Brigham Young University in 1979 and
19 a Bachelor of Science degree in Accounting from Brigham Young University in
20 1978. In addition to my formal education, I have also attended various
21 educational, professional, and electric industry-related seminars.

22 **Q. What is the purpose of your testimony?**

23 A. The purpose of my testimony is to describe the proposed changes to the

1 Company's energy efficiency programs for business customers and explain why
2 the Company is proposing these changes.

3 **Q. What is the purpose of the current programs and who is eligible to**
4 **participate?**

5 A. Currently there are three programs for business customers: FinAnswer Express
6 (Schedule 115), Energy FinAnswer (Schedule 125) and Irrigation Energy Savers
7 (Schedule 155). The programs are intended to maximize the efficient utilization of
8 the electricity requirements of new and existing loads in nonresidential facilities
9 through the installation of energy efficiency measures. Schedule 10 customers are
10 eligible for Irrigation Energy Savers (Schedule 155). Commercial and industrial
11 customers on Schedules 6, 6A, 7, 7A, 9, 12, 19, 23, 23A, 24, 35, 35A and dairy
12 barns served under the Company's residential rate schedules are eligible for
13 Energy FinAnswer¹ (Schedule 125) and FinAnswer Express (Schedule 115).

14 **Overview of Business Customer Energy Efficiency Program Changes**

15 **Q. Please provide a high level overview of the changes that you are proposing to**
16 **the business customer's energy efficiency programs.**

17 A. The Company proposes that the following changes be made to the tariffs: (1)
18 consolidate the three non-residential energy efficiency programs into one new
19 program called wattsmart Business² with changes and with a tariff similar to
20 Schedule 115; (2) update incentive levels; (3) expand the program to include
21 energy management services and incentives; (4) update and expand the
22 prescriptive incentive offer; and (5) include a new offer for small businesses.

¹ Subject to a 20,000 minimum square footage requirement for existing commercial facilities.

² Schedule 140 is titled Non-Residential Energy Efficiency; the program name is wattsmart Business.

1 **Q. Please explain why the changes are proposed.**

2 A. The changes are proposed to increase program participation; streamline program
3 delivery for the customer and the Company; increase the comprehensiveness of
4 the program to reach beyond a capital equipment focus; update the program to
5 align with current codes, standards, third party specifications and market data; and
6 increase small business customer participation.

7 These programs have been operating successfully for many years. As part
8 of continuous improvement, the Company has identified the following
9 improvement areas:

- 10 • Streamline the program for customers – Under the current structure,
11 customer projects may move from Energy FinAnswer to FinAnswer
12 Express (or vice versa) based on changes in project scope, timelines and/or
13 economics. This creates complexity for the customer that can impede
14 participation. By consolidating the programs into one program, there is no
15 need for the customer to sign new program paperwork in the event the
16 project scope evolves during the course of the project. Schedule 10
17 irrigation customers would be eligible for incentives listed in the
18 prescriptive incentive tables (e.g. green motor rewind measure). Also, by
19 consolidating the programs, customers with both irrigation and
20 commercial/industrial accounts would have a single energy efficiency
21 program for all of their non-residential accounts.
- 22 • Update incentives – Updating incentives is expected to increase
23 participation while maintaining program cost-effectiveness.

- 1 • Expand the program to include energy management – The Company's
2 current program offerings in Idaho focus on capital based projects.
3 Expanding the program to include energy management, savings from
4 improved operations, maintenance and management practices would allow
5 customers lacking capital to participate.
- 6 • Update and expand the prescriptive incentives – The Company's current
7 program (FinAnswer Express) includes prescriptive offers where
8 incentives are paid for typical/common energy efficiency upgrades based
9 on unit counts such as \$/lamp or \$/horsepower. Prescriptive programs of
10 this nature periodically require updates to maintain alignment with energy
11 code, standards, third party specifications and market data which change
12 over time. They also expanded periodically to include new measures ready
13 for a prescriptive/ streamlined approach. This filing in addition to
14 consolidating the Company's current prescriptive program within the
15 wattsmart business program will make those required changes.
- 16 • Add an offer specific to small business – The Company's current program
17 offerings can be improved to be more attractive to small business
18 customers and increase participation by this hard-to-reach segment by
19 expanding program services and incentives specifically targeting these
20 customers.

21 **Program consolidation**

22 **Q. Please provide detail on the program consolidation changes.**

23 A. The changes include several updates to the program structures and incentive

1 levels in order to increase the acquisition of energy efficiency savings and to
 2 streamline participation for customers. The proposed changes to the current
 3 program structure and incentive levels are provided in Table 1.

Table 1 – Summary of Changes

	Current program	Proposed for Schedule 140	Comments
Schedule 125 - Energy FinAnswer	Incentive: \$0.12/kWh + \$50/kW	Incentive: \$0.15/kWh	Simplify incentive for customers. Increases total incentive by an estimated 21% and forecasted savings by 7% when combined with adjustment of project cost cap.
	Incentives capped at 50% of eligible project costs	Increase cap to 70% of eligible project costs	
	Customer pays for commissioning	Program funds Savings Verification	Decreases customer complexity and improves controls related to performance verification.
	Commercial and Industrial have different program eligibility	Commercial and Industrial have same program eligibility	Simplify offer and expand eligibility to increase participation.
	New Construction Design Assistance	Discontinue unique incentive	Low participation and offer not moving the market.
	Design Honorarium	Discontinue incentive	Low participation and offer not moving the market.
	Design Incentive	Discontinue incentive	Low participation and offer not moving the market.
	Minimum 20,000 SF of existing commercial space to be eligible	Remove minimum space requirement	Hard to quantify, removing will simplify delivery and increase participation.
	Custom incentives available for listed measures	Listed measures paid at listed amounts.	Simplify process so that the incentive listed is always the incentive paid. Allow prescriptive and custom measures to be included in single project.
Schedule 115 - FinAnswer Express	Incentives capped at 50% of eligible project costs for lighting retrofits and custom measures	Increase cap to 70% of eligible project costs	Increases incentives for participation.

Schedule 155 - Irrigation Energy Savers	Incentive: \$0.12/kWh + \$50/kW	Incentive: \$0.15/kWh	Simplify incentive for customers. Increases total incentive by an estimated 21% and forecasted savings by 7% when combined with adjustment of project cost cap.
	Incentives capped at 50% of eligible project costs	Increase cap to 70% of eligible project costs	
Schedule 140 - New Offerings in consolidated tariff	n/a	Add energy project manager co-funding. \$0.025/kWh of program savings	See “energy project manager” discussion below
	n/a	Expand offering to include integration of energy management into business practices. Incentive of \$0.02/kWh annual energy savings.	Increases savings and utilizes monitoring to identify savings. See “energy management” discussion below.
	n/a	Use modification procedure approved in Order 32594 for information contained in Exhibit No. 1 – Idaho Incentive Tables and Information	See “Flexible tariff” discussion below.

1 **Energy Project Manager Co-funding**

2 **Q. What is energy project manager co-funding?**

3 A. Energy Project Manager co-funding is designed to help customers pursue energy
4 opportunities more consistently and create a culture of energy efficiency at their
5 facilities by providing co-funding for a staff or contractor position to identify and
6 manage energy projects. Co-funding will be performance based and is contingent

1 upon a customer's identification of and planning to meet a specific energy savings
2 goal³ over a prescribed timeframe; typically 12–18 months.

3 **Q. What savings count toward the customer's energy savings goal?**

4 A. Only savings reported through Schedule 140 will count toward achieving the kWh
5 savings goal. If the customer meets these verified goals as outlined in a savings
6 plan, co-funding continues. If milestones and savings goals are missed, co-
7 funding will be suspended and/or terminated and repayment of unearned co-
8 funding will be required.

9 **Q. What is the anticipated role of the energy project manager?**

10 A. The Energy Project Manager is to serve as the primary contact for implementation
11 of energy efficiency projects at a customer site. The Energy Project Manager will
12 be an employee or direct contractor of the customer and not an employee or
13 contractor of Rocky Mountain Power. The Energy Project Manager must be a
14 specific person and not a pool of labor without an individual role.

15 **Q. How is the energy project manager salary determined?**

16 A. Subject to approval by the Company, it is the customer's choice regarding the
17 compensation paid to the Energy Project Manager and the co-funding cannot
18 exceed the lesser of (1) the pay and overhead for the assigned individual or (2) the
19 amount listed in Table 1 for completed projects. Documentation of pay and
20 overhead costs are required as part of the co-funding agreement. The Energy
21 Project Manager co-funding is based solely on electrical energy efficiency or
22 energy management savings.

³ The Company will post the minimum energy savings goal on its website. The minimum may be revised if needed.

1 **Q. How are energy savings from projects receiving energy project manager co-**
2 **funding accounted for?**

3 A. The Company assumed no additional savings would be directly attributable to the
4 addition of energy project manager co-funding in the analysis in Exhibit No. 2,
5 only the cost of the addition of co-funding was added. While the Company
6 believes the availability of co-funding will increase project activity and add to
7 program savings over time, the Company utilized the most conservative
8 assumption in this analysis to eliminate the possibility of double counting energy
9 savings.

10 **Energy management**

11 **Q. What is energy management?**

12 A. Energy Management is a system of practices that creates reliable and persistent
13 electric energy savings through improved operations and maintenance, and
14 management practices at customer sites. Unlike typical energy efficiency projects,
15 energy management projects may require little to no capital investment by
16 customers to achieve sustainable savings at their facilities.

17 **Q. What is the Energy Management offering?**

18 A. The Energy Management offering is designed to complement program offerings
19 for capital improvements and the new Energy Project Manager co-funding.
20 Designed with the customer in mind, Energy Management will offer multiple
21 levels of engagement: Strategic Energy Management, Persistent Commissioning,
22 Industrial Re-commissioning, and Re-commissioning. The level of engagement

1 will be in direct response to the customer's specific needs and their commitment
2 to a process that can extend from 12–24 months.

3 The Energy Management offering provides a systematic approach to integrating
4 energy management into an organizations business practices. Monitoring of
5 building systems and industrial process controls is used to identify and quantify
6 energy savings.

7 **Q. What is the estimated savings per customer through energy management?**

8 A. The Company has identified an average potential of three percent energy savings
9 per customer site (with usage of at least 500,000 kWh) through improved energy
10 management practices. Measurement of savings is site and process specific,
11 generally consisting of the establishment of an operational baseline and savings
12 measurements through either continuous monitoring of operational data, or at
13 specific intervals during the Company's energy management engagement with the
14 customer.

15 **Q. What is the assumed measure life for energy management?**

16 A. The incentive level and program design was modeled with a savings persistence
17 of three years in recognition of the nature of how the savings are derived i.e. from
18 changes in operational, maintenance, and management practices as opposed to
19 less variable capital improvements.

20 **Q. How did the Company ensure energy management savings were**
21 **differentiated from capital project savings?**

22 A. The energy management savings assumption included in this application is based
23 on a third party assessment of energy management opportunities for each state

1 where the Company is responsible for delivering programs. The assessment
2 specifically separated energy management savings from capital equipment project
3 savings to ensure savings are not double within the Company's projections and
4 economic assessment provided as Exhibit No. 2.

5 **Flexible tariff**

6 **Q. What is the structure for the proposed Schedule 140 program and tariff?**

7 A. Schedule 140 will utilize the modification procedure established with the approval
8 of Case No. PAC-E-12-09 by the Idaho Public Utilities Commission for Schedule
9 115.

10 **Q. How did the Company describe the program change process in Case No.**
11 **PAC-E-12-09⁴?**

12 A. The Company stated:

13 "future changes to Program details⁵ will be managed as follows:

- 14 • Similar to the filing process, the Company will provide information on
15 any proposed changes to Program details to Commission staff and
16 allow for a reasonable period of time for staff to comment on the
17 proposed changes.
- 18 • Once Commission staff comments, if any, are resolved the final set of
19 changes will be clearly posted on the website with at least 45 days
20 advance notice.
- 21 • After the 45 day noticing period the changes would then be in effect."

22 **Q. What are the components of Schedule 140?**

23 A. If approved, Schedule 140 will consist of the tariff (Exhibit No. 4) that contains
24 general information on the program with more detailed program specifics such as
25 qualifying equipment and incentives posted to the Company website. The
26 information proposed to be posted to the website is provided in Exhibit No. 1:

⁴ The flow chart documenting the process is provided as Exhibit No. 3 to this application.

⁵ Program details are provided in Exhibit No. 1 to this application.

1 Idaho Incentive Tables and Information. Subsequent changes to this information
2 will follow the program change process described above.

3 **Update and Expand the Prescriptive Incentive Offer**

4 **Q. What is the purpose of the updates to the prescriptive offer?**

5 A. The changes are intended to align the program with changes to codes, standards,
6 third party specifications and new market data and increase the
7 comprehensiveness of the program while maintaining or improving cost
8 effectiveness.

9 **Q. What is the scope of the updates to the prescriptive offer?**

10 A. The proposed changes include updates for existing measures currently in
11 FinAnswer Express (Schedule 115) incentive tables as well as to add new
12 measures. Further details on the proposed changes to the prescriptive offer are
13 included as Exhibit No. 5 to this filing.

14 **Q. How were the changes identified?**

15 A. The changes were informed by a review of applicable codes and standards, third
16 party specifications such as Consortium for Energy Efficiency ("CEE") and
17 ENERGY STAR, past program participation, and vendor feedback. This type of
18 review is completed on a periodic basis to keep existing program measures
19 current and to add new measures as appropriate in order to maintain program
20 relevancy and overall comprehensiveness. The last comprehensive review
21 informed program changes to Schedule 115 (FinAnswer Express) that were
22 approved effective July 14, 2012.

Impact of Codes and Standards

Q. When did the Company adjust the baseline for linear fluorescent lighting retrofits?

A. On January 1, 2014, the Company adjusted the baseline for fluorescent lighting retrofits from an energy saving T12 lamp and energy efficient magnetic ballast configuration to a 32W T8 lamp and electronic ballast configuration.

Q. Why was the lighting baseline change made and was it included in the cost-effectiveness analysis?

A. The lighting baseline change was made to maintain alignment with changes in federal lighting equipment efficacy standards. These types of baseline adjustments help ensure the Company does not pay more than is necessary when helping facilitate customer lighting improvements. The lighting baseline change does not remove incentives for lighting system retrofits, but does change the baseline usage assumption from which program savings and incentives are calculated. The change is incorporated into the cost-effectiveness analysis provided in Exhibit No. 2 as an increase in the utility cost of savings acquisition when compared to prior years.








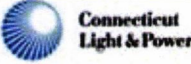
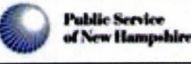


New Offer for Small Businesses

Q. What is the small business offer?

A. The small business offer is aligned with a best-practice approach used by many other utilities (listed in Table 2, below) utilizing a pool of Company-approved and managed contractors to work directly with small/medium business customers to identify energy-efficiency upgrades, estimate savings and incentives, and install

high-efficiency equipment. Participating customers utilizing an approved contractor will be eligible for an enhanced incentive offer targeted at 80 percent of the project cost. To reduce the customer's out-of-pocket expenses and minimize cash flow impacts, the customer can assign the incentive to the contractor who will then apply it as an up-front reduction to the overall project invoice/cost. Participating contractors will complete and submit the required incentive application and documentation to the Company for payment of the incentive amount that was assigned to them by the customer. Further details on the small business offer are included as Exhibit 6 to this filing.

Table 2 - Similar Offers from Other Utilities

Utility	Program Name	Customer Eligibility
 Pacific Gas and Electric Company	Right Lights	Small and Mid-Sized Business
	Express Solutions	Demand ≤ 100 kW + schools
	Business Solutions Small Business Program	< 145,000 kWh/yr
 Black Hills Energy	Small Business Direct Install Lighting Program	≤ 350 kW
 SOUTHERN CALIFORNIA EDISON <small>AN EDISON INTERNATIONAL COMPANY</small>	Direct Install	Small and Mid-Sized Business
	Complete Energy Solutions	Up to 299 kW / mo
 nationalgrid <small>The power of action.</small>	Small Business Services program	≤300kW / month
	Small Business Energy Advantage	Avg peak demand 10 kW - 200 kW
	Small Business Energy Solutions	≤ 200 kW / month
	Smart Energy Savers	≤60 kW / mo
	Small Business Lighting	≤ 400 KW

Q. What customers are eligible for the small business offer?

A. Customers receiving electric service in Idaho on Rate Schedule 23 & 23A.

1 **Q. Are there other eligibility criteria for the small business offer?**

2 A. Additional eligibility criteria may be added (e.g. square footage, operating hours,
3 kWh usage) to align with savings targets, incentive budgets, and cost
4 effectiveness requirements and will be posted on the Company website.

5 **Q. What measures will be included in the offer initially?**

6 A. Initially, the measure list will be focused on high-efficacy fluorescent lighting
7 technologies, occupancy controls, and LED recessed downlights and exit signs.
8 These measures are most frequently found in small/medium businesses, as shown
9 in Table 3 in Exhibit No. 6. Measures not included in the small business customer
10 incentive table will be incentivized at the standard incentive rates offered for
11 those measures in the wattsmart business program.

12 **Q. How much are the incentives be determined and controlled?**

13 A. The Company is proposing to define the incentives for this offer on a measure-
14 specific basis targeted to cover 80 percent of the customer cost. Incentives will be
15 capped at 80 percent to ensure a minimum customer “co-pay” of 20 percent.

16 **Q. How will the incentives be set?**

17 A. Incentives will initially be determined relative to market costs collected from the
18 contractor application process used to select and approve contractors and will not
19 exceed the maximum incentive values in Schedule 140. The incentive table will
20 be posted on the Company’s website.

21 **Transition from Current Programs to Wattsmart Business**

22 **Q. How will the Company transition projects currently in progress?**

23 A. In the event the Commission approves the Company’s request, customers with

1 Incentive Agreements issued between the date of this filing and the effective date
2 approved by the Commission will receive final project incentive(s) under the new
3 tariff unless their project would have received a higher incentive amount under
4 the existing version of the program. Customers with Incentive Agreements in
5 place prior to this filing will receive incentives consistent with the version of the
6 program at the time the agreement was issued.

7 **Q. Are there any other changes proposed?**

8 A. In addition to the changes I have outlined, the Company is proposing other minor
9 administrative changes to language.

10 **Cost-Effectiveness**

11 **Q. How was cost effectiveness assessed?**

12 A. The Company utilized the five standard tests for economic analysis of demand
13 side management measure /programs. These tests are the same ones used by the
14 Company in prior program filings and annual performance reporting. Using the
15 standard tests, the impacts of the proposed changes were assessed in a series of
16 steps described below. The first step was to develop a forecast of expected
17 participation, savings, and costs absent any program changes from all three of the
18 current business programs. This same look is provided in the Company's annual
19 reports as the Commercial and Industrial Portfolio and forms the "business-as-
20 usual" case. The business-as-usual case covers three years: 2015–2017 and
21 utilizes net-to-gross, realization rates, and measure life values utilized in or
22 derived from the values used in the 2013 Idaho annual report. The next step was
23 to assess the cost-effectiveness of each of the proposed program changes or new

1 measures in cases where the changes or additions were likely to have a material
2 impact on program cost-effectiveness. Inputs for measure costs, measure life,
3 realization rates, and net-to-gross ratio are specific to each of the measures. The
4 impacts of changes or new measures were also assessed over three years to align
5 with the business-as-usual case. The final step in the assessment was to add the
6 benefits and costs of each change to the benefits and costs of the business-as-
7 usual case. This provides a before and after comparison of the aggregate impact of
8 the changes as well as illustrating the likely contribution from each of the
9 changes. Results are provided by individual year and for all three years combined
10 in Exhibit No. 2.

11 **Q. What discount rates did the company use for the cost effectiveness analysis?**

12 A. The Company utilized the Weighted Average Cost of Capital ("WACC") as the
13 discount rate for the five standard tests. This approach is consistent with prior
14 Company reporting and the Company understands it is consistent with Avista
15 Corporation's approach in Idaho. The Company understands this is slightly
16 different than Idaho Power which derives a different rate for the Participant Cost
17 Test ("PCT"). The Company also reviewed Appendix N of the 6th Power Plan
18 which documents underlying derivations used to arrive at the 6th Power Plan
19 discount rate. While Appendix N uses October 2009 data it did provide a useful
20 context and data source to compare to the Company's rate. The Capital Asset
21 Pricing Model used in Department of Energy calculations is considered a good
22 proxy for business customer investment decisions and the rate ranges from 7.3
23 percent to 7.5 percent. Since this application assesses the economics of changes to

1 a business customer program and the Department of Energy (“DOE”) rate is close
2 to the Company’s WACC rate of 6.88 percent, the Company chose to utilize the
3 WACC rate for all tests for this application.

4 **Q. Are all the new measures or additions costs effective?**

5 A. Ten of the thirteen new measures or changes are cost effective from the
6 PacifiCorp Total Resource Cost (“PTRC”), Total Resource Costs (“TRC”) and
7 Utility Cost Test (“UCT”) perspectives on a standalone basis. Two of the
8 changes; both tied to increasing incentives, do not pass the UCT on a standalone
9 basis. These results are more indicative of the challenges in modeling the cost
10 effectiveness of those changes rather than their possible contribution to program
11 performance. Increasing the incentive is forecasted to generate additional savings,
12 however, the increased incentives has to be paid to all participants, not just the
13 ones who generate added savings. Since the increased incentives is available to all
14 participants, the utility costs of this measure include incentives paid to
15 participants whose savings are already reflected in the business-as-usual case. As
16 a consequence, the increased incentive costs for this measure are
17 disproportionately higher than the incremental savings and results in a UCT less
18 than 1.0. The Energy Management offer passes the UCT, but not the PTRC or
19 TRC. These results are driven primarily by some uncertainty surrounding
20 customer costs for implementation. Individual results for each change or measure
21 are provided in Exhibit No. 2.

1 **Q. Is the new program, (the combination of business as usual case and all the**
2 **changes) cost-effective?**

3 A. Yes, see the cost-effectiveness analysis in Exhibit No. 2 supporting my testimony.
4 The cost effectiveness of the new program includes the impacts of adding the
5 three non-cost effective measures, ten measures that are cost effective on a stand-
6 alone basis and the additional program portfolio costs for energy project manager
7 co-funding.

8 **Q. Does this conclude your testimony?**

9 A. Yes.

Case No. PAC-E-14-08
Exhibit No. 1
Witness: Kathryn C. Hymas

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Testimony of Kathryn C. Hymas
Idaho Incentive Tables with Changes Marked

August 2014

Exhibit 1

Idaho ~~FinAnswer Express~~ Non-Residential Energy Efficiency

This document includes the following three sections:

- Definitions of terms used in Schedule ~~115-140~~ and other program documents
- Incentives – General Information
- Incentive tables

DEFINITIONS:

~~Commercial Building:~~ ~~A structure that is served by Company and meets the applicability requirements of this tariff at the time an Energy Efficiency Incentive Agreement/Application is executed or approved by the Company which does not meet the definition of an Industrial Facility.~~

Customer: Any party who has applied for, been accepted and receives service at the real property, or is the electricity user at the real property.

Energy Efficiency Incentive: Payments of money made by Company to Owner or Customer for installation of an Energy Efficiency Measure pursuant to an ~~executed-acknowledged~~ Energy Efficiency Incentive ~~Agreement~~ Offer Letter or approved Energy Efficiency Incentive Application.

Energy Efficiency Incentive ~~Agreement/Application~~ Offer Letter: An ~~agreement between offer made by Company and acknowledged by~~ Owner or Customer ~~and Company or a Company provided application submitted by the Owner or Customer and approved by the Company~~ providing for Company to furnish Energy Efficiency Incentives ~~with respect to Energy Efficiency Measures pursuant to this Tariff Schedule for an Energy Efficiency Project.~~

Incentive Application: An application submitted by Owner or Customer to Company for Energy Efficiency or Energy Management Incentives.

Energy Efficiency Measure (EEM): A permanently installed measure which can improve the efficiency of the Customer's electric energy use.

Energy Efficiency Measure (EEM) Cost:

New Construction/Major Renovation: EEM Cost is the total installed cost of energy efficiency equipment or system minus the cost of the code compliance/common practice equipment or system.

Retrofit: EEM Cost is the total installed cost of the energy efficiency equipment or modification.

In the case of New Construction, Major Renovation and Retrofits, EEM Costs shall mean the Owner or Customer's reasonable costs incurred (net of any discounts, rebates or incentives other than Energy Efficiency Incentives from the Company, or other consideration that reduces the final actual EEM Cost incurred by the Owner or Customer) to purchase and install EEMs at the Owner's or Customer's facility. If the owner or customer installs the EEM then the cost of installation shall be equal to the Owner's or Customer's actual labor costs for such installation.

Energy Efficiency Project: One or more EEM(s) at a Non-residential Facility¹ with similar one year payback limitations (below) covered by one Energy Efficiency Incentive AgreementOffer Letter.

Energy Efficiency Project Cost: The sum of EEM Costs for one or more EEM(s) with similar one year payback limitations (see below) covered by one Energy Efficiency Incentive AgreementOffer Letter.

Energy Management Offer Letter: An offer made by Company and acknowledged by Owner or Customer and Company providing for Company to furnish Energy Management Incentives for an Energy Management Project.

Energy Management Incentive: Payments of money made by Company to Owner or Customer for implementation of an Energy Management Measure pursuant to an executed Energy Management Offer Letter.

Energy Management Measure (EMM): an operational improvement which, when implemented in an eligible facility, result in electric savings compared to current operations as determined by Company.

Energy Management Project: One or more EMM(s) at a Non-residential Facility covered by one Energy Management Offer Letter.

Energy Project Manager: an employee or direct contractor of the Customer who will manage electrical energy efficiency projects that deliver savings toward the Customer/Owner's energy savings goal.

Energy Project Manager Co-funding: funding towards the Energy Project Manager agreed upon full value salary that is solely attributable to electrical energy efficiency work.

Industrial Facility: Buildings and process equipment associated with manufacturing.

Major Renovation: A change in facility use type or where the existing system will not meet Owner/Customer projected requirements within existing facility square footage.

Mixed Use: Buildings served by a residential rate schedule and a rate schedule listed under Applicable in Idaho Schedule 140 shall be eligible for services under ~~this schedule~~Schedule 140 provided the Energy Efficiency Project meets the definition of New Construction or where the Company adjusts the baseline energy consumption and costs.

New construction: A newly constructed facility or newly constructed square footage added to an existing facility.

¹ Measures at multiple Non-residential Facilities may be included in one Offer Letter for convenience; however, project incentive caps (if any) are applied per individual Non-residential Facility.

Non-residential Facility: A Customer site that is served by Company and meets the applicability requirements of Idaho Schedule 140, the program tariff, on file with the Idaho Public Utilities Commission.

Owner: The person who has both legal and beneficial title to the real property, and is the mortgager under a duly recorded mortgage of real property, the trustor under a duly recorded deed of trust.

Retrofit: Changes, modifications or additions to systems or equipment in existing facility square footage.

INCENTIVES – GENERAL INFORMATION

Incentives for Measures Listed in the Incentive Tables

Per unit incentives are listed in the program incentives tables for specific Energy Efficiency Measures (EEMs) and are subject to the incentive caps below. Incentives are subject to change and current incentives can be found on the Idaho energy efficiency program section of the Company website.

Custom Incentives

EEMs not listed in the prescriptive incentive tables (typical upgrades) may be eligible for a ~~custom~~ Custom Energy Efficiency Incentive. The Company will complete an analysis of the EEM Cost and electric energy savings and determine whether to offer a custom Energy Efficiency Incentive and the Energy Efficiency Incentive amount. ~~Custom Energy Efficiency Incentives for such EEMs will be the product of multiplying the Company's estimate of annual energy savings by \$0.10/kWh; and subject to the incentive caps in the table below.~~

Electric savings resulting from lighting interaction with HVAC equipment will not be eligible for an Energy Efficiency Incentive.

Energy management incentives

Non-Capital; improvements to operations and maintenance within a qualifying facility may be eligible for an Energy Management Incentive. Company will partner with Customer to complete an analysis of the electric energy savings of potential energy management measures and determine whether to offer an Energy Management Incentive and the incentive amount.

Energy project manager co-funding

The Company may fund an additional \$0.025 per kWh of verified wattsmart Business annual energy savings, up to 100 percent of the Energy Project Manager's salary. Salary is based on a letter from the Customer/Owner's human resources or accounting department stating the base annual salary and an appropriate overhead percentage, and subject to approval by Company.

Baseline adjustments

The baseline wattage for all Retrofit linear fluorescent lighting Energy Efficiency Measures is the lesser of

- a) Wattage of existing equipment or
- b) Wattage of deemed baseline ballast and lamp combination as listed in the lighting table available on the Idaho energy efficiency program section of the Company website.

Company may adjust baseline electric energy consumption and costs to reflect any of the following: energy codes, standard practice, changes in capacity, changes in production or facility use and equipment at the end of its useful life. Such adjustments may be made for lighting energy efficiency measures installed in New Construction/Major Renovation projects where energy code does not apply.

INCENTIVES:^{2, 3}

<u>Category</u>		<u>Incentive</u>	<u>Percent Project Cost Cap⁴</u>	<u>1-Year Simple Payback Cap for Projects⁵</u>	<u>Other Limitations</u>
<u>Prescriptive Incentives (Typical Upgrades)</u>	<u>Lighting – Retrofit</u>	<u>See incentive lists</u>	<u>70%</u>	<u>Yes</u>	<u>See incentive lists</u>
	<u>Lighting – New Construction/ Major Renovation</u>		<u>None</u>	<u>No</u>	
	<u>Motors</u>		<u>None</u>	<u>No</u>	
	<u>HVAC</u>		<u>None</u>	<u>No</u>	
	<u>Building Envelope</u>		<u>None</u>	<u>No</u>	
	<u>Food Service</u>		<u>None</u>	<u>No</u>	
	<u>Appliances</u>		<u>None</u>	<u>No</u>	
	<u>Office</u>		<u>None</u>	<u>No</u>	
	<u>Farm and Dairy</u>		<u>70%</u>	<u>Yes</u>	
	<u>Compressed Air</u>		<u>70%</u>	<u>Yes</u>	
	<u>Wastewater and other Refrigeration</u>		<u>70%</u>	<u>Yes</u>	
<u>Enhanced Incentives for Small Businesses</u>		<u>Determined by Company with not-to-exceed amounts as shown in Table 12</u>	<u>80%</u>	<u>No</u>	<u>Available to all Schedule 23 and 23A customers meeting small business criteria on Company website. Qualifying equipment must be installed by an approved contractor/vendor.</u>
<u>Custom Non-Lighting Incentives for qualifying measures not on the prescriptive list.⁶</u>		<u>\$0.15 per annual kWh savings</u>	<u>70%</u>	<u>Yes</u>	<u>N/A</u>
<u>Energy Management</u>		<u>\$0.02 per kWh</u>	<u>N/A</u>	<u>No</u>	<u>N/A</u>

² The Customer or Owner may receive only one financial incentive from Company per measure. Financial incentives include energy efficiency incentive payments and energy management payments. Energy Project Manager Co-Funding is available in addition to the project incentives.

³ Incentives for prescriptive measures are restricted to the amounts shown on the website.

⁴ All EEM Costs are subject to Company review and approval prior to offering making an Energy Efficiency Incentive Agreement Offer. All final EEM Costs are subject to Company review and approval prior to paying an Energy Efficiency Incentive per the terms of the Energy Efficiency Incentive Agreement Offer Letter or approved Application. Company review and approval of EEM Costs may require additional documentation from the Customer or Owner.

⁵ The 1 year simple payback cap means incentives will not be available to reduce the simple payback of a project below one year. If required, individual measure incentives will be adjusted downward pro-rata so the project has a simple payback after incentives of one year.

⁶ Project Cost and 1-Year Simple Payback Caps do not apply to New Construction and Major Renovation projects that are subject to state energy code.

	<u>annual savings</u>			
Energy Project Manager Co-Funding	<u>\$0.025 per kWh</u> <u>annual savings</u>	<u>100% of salary</u> <u>and eligible</u> <u>overhead</u>	<u>No</u>	<u>Minimum savings</u> <u>goal posted on</u> <u>Company website</u> ⁷

Energy Efficiency Incentive Caps Table

Measure Category	Percent of Energy Efficiency Project Cost Cap	1-year Simple Payback Cap for Energy Efficiency Projects ¹
Measures Listed in Incentive Tables		
Lighting Retrofit	50%	Yes
Lighting New Construction/Major Renovation	None	No
Motors	None	No
HVAC	None	No
Building Envelope	None	No
Food Service	None	No
Appliances	None	No
Office ³	None	No
Appliances	None	No
Dairy/Farm Equipment	None	No
Compressed Air	None	No
Measures Not Listed in Incentive Tables		
Exterior Lighting New Construction/Major Renovation Measures Receiving a Custom Incentive	None	No
Other Measures Receiving Custom Incentive	50%	Yes

Notes for energy efficiency caps table:

1 The 1 year simple payback cap means Energy Efficiency Incentives will not be available to reduce the simple payback of an Energy Efficiency Project below one year. If required, individual EEM Energy Efficiency Incentives will be adjusted downward pro-rata so the Energy Efficiency Project has a simple payback after incentives of one year or more.

2 EEM Costs are subject to Company review and approval and Company may require additional documentation from the Customer or Owner.

3 The Network Personal Computer Power Management Software measure has a measure cost cap. See the Office incentive table for details.

Additional notes about incentives

~~Electric savings resulting from lighting interaction with HVAC equipment will not be eligible for an Energy Efficiency Incentive.~~

~~Company may adjust baseline electric energy consumption and costs to reflect any of the following: energy codes, standard practice, changes in capacity, changes in production or facility use and equipment at the end of its useful life. Such adjustments may be made for lighting~~

⁷ Customers may aggregate accounts to achieve minimum requirements.

~~energy efficiency measures installed in New Construction/Major Renovation projects where energy code does not apply.~~

~~The baseline wattage for all Retrofit linear fluorescent lighting Energy Efficiency Measures is the lesser of~~

- ~~c) Wattage of existing equipment or~~
- ~~d) Wattage of deemed baseline ballast and lamp combination as listed in the lighting table available on the Idaho energy efficiency program section of the Company website.~~

~~All EEM Costs are subject to Company review and approval prior to offering an Energy Efficiency Incentive Agreement. All final EEM Costs are subject to Company review and approval prior to paying an Energy Efficiency Incentive per the terms of the Energy Efficiency Incentive Agreement or approved Application. Company review and approval of EEM Costs may require additional documentation from the Customer or Owner.~~

~~The Owner or Customer may receive a financial incentive for EEM purchase/installation from only one Company program per EEM.~~

Incentives for lighting retrofits

Measure	Category	Eligibility Requirements	Incentive
T8 Fluorescent	Premium CEE T8	4' CEE Qualified High Performance Lamp and CEE Qualified Ballast included on qualified list 4' CEE Qualified Reduced Wattage or High Performance Lamp and CEE Qualified Ballast included on qualified ballast list	\$73/Lamp
		4' CEE Qualified Reduced Wattage Lamp and CEE Qualified Ballast included on qualified list	\$5/Lamp
	Premium Delamp	4' CEE Qualified Reduced Wattage or High Performance Lamp and CEE Qualified Ballast. Must remove one or more lamps. To delamp and an existing fixture, the lamp and all corresponding sockets must be permanently disabled.	\$21/Lamp Removed
	Relamp	Lamp wattage reduction ≥ 3 Watts, No ballast retrofit	\$0.251/Lamp
	High Bay	Fixture with less than six (6) lamps: 4' CEE Qualified High Performance Lamp. Must replace T12HO/VHO, Incandescent or HID. 4' CEE Qualified High Performance Lamp. Must replace T12HO, Incandescent, or HID.	\$2018/Lamp
		Fixture with six (6) or more lamps: 4' CEE Qualified High Performance Lamp. Must replace T12HO/VHO, Incandescent or HID.	\$12/Lamp
	Continuous Operation	4' CEE Qualified Reduced Wattage or High Performance Lamp and CEE Qualified Ballast included on qualified ballast list installed in a continuous operation application	\$20/Lamp
T5 Fluorescent	Standard	4' Nominal Lamp ≤ 28 Watts, Ballast Factor ≤ 1.0	\$5/Lamp
	Relamp	Lamp wattage reduction ≥ 3 Watts, No ballast retrofit	\$0.251/Lamp
	High Bay	Fixture with less than six (6) lamps: 4' T5HO Lamp. Must replace T12HO/VHO, Incandescent or HID. 4' Nominal High Output Lamp	\$2018/Lamp
		Fixture with six (6) or more lamps: 4' T5HO Lamp. Must replace T12HO/VHO, Incandescent or HID.	\$12/Lamp
	Continuous Operation	4' Nominal High Output Lamp installed in a continuous operation application	\$20/Lamp
Cold Cathode	Screw-in Lamp	All wattages	\$5/Lamp
Compact Fluorescent Lamp (CFL)	Screw-in Lamp	All wattages (See Note 7)	\$2/Lamp
	Hardwired Fixture	All wattages	\$5/Fixture
Ceramic Metal Halide (CMH)	CMH Fixture	All wattages	\$35/Fixture
Pulse Start Metal Halide (PSMH)	PSMH Fixture	Wattages $> 500W$	\$60/Fixture
	Electronic Ballast	Must be used in place of or replace a magnetic ballast	\$20/Ballast
Induction	Induction Fixture	All wattages, New fixtures only	\$12575/Fixture
LED	Integral Screw-in Lamp	LED must be listed on qualified equipment list	\$10/Lamp
	Recessed Downlight	LED must be listed on qualified equipment list	\$10/Fixture
	Outdoor Area and Roadway Other LED	LED must be listed on qualified equipment list	\$0.15/kWh annual energy savings \$100/Fixture

	Parking Garage	LED must be listed on qualified equipment list	\$100/Fixture
	High and Low Bay	LED must be listed on qualified equipment list	\$100/Fixture
Lighting	Custom	Not listed above	\$0.15/kWh annual energy savings

Notes for lighting retrofit incentives:

1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.
- ~~2. Incentives are capped at 70 percent of Energy Efficiency Project Costs and will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy Efficiency Project Costs are subject to Company approval.~~
Incentives are capped at 50 percent of Energy Efficiency Project Costs and subject to the one-year payback cap.
- ~~3. Two foot U tube lamps may be substituted for four foot linear fluorescent lamps.~~
4. Incentives for T8 Premium Delamps may not be combined with other linear fluorescent lamp or fixture incentives. Complete fixture removals are not eligible.
5. Incentives for T8 and T5 Fluorescent Relamps may not be combined with other linear fluorescent lamp or fixture incentives and will only be paid once per facility.
6. Qualified equipment lists referenced in the table are posted on the Idaho energy efficiency program section of the Company's website.
- ~~7. The incentive for Screw In CFL Lamps will no longer be available effective January 1, 2014.~~

BF = Ballast Factor

CEE = Consortium for Energy Efficiency

CFL = Compact Fluorescent Lamp

CMH = Ceramic Metal Halide

HID = High Intensity Discharge (e.g. Mercury Vapor, High Pressure Sodium, Metal Halide)

HO = High Output

LED = Light-Emitting Diode

PSMH = Pulse-Start Metal Halide

VHO = Very High Output

Incentives for lighting controls and non-general illuminance (retrofit only)

Measure	Category	Eligibility Requirements	Incentive
Lighting Control	Occupancy Control	PIR, Dual Tech, or Integral Sensor	\$ 0.30/Watt <u>\$0.34/Watt</u> controlled75/Sense f
	Daylighting Control	Must control interior fixtures with Continuous, Stepped, or Bi-level ballast or automated control that dims 50% or more of the fixture in response to daylight. Must control interior fixtures with driver or qualifying dimming ballast that dims 50% or more of the fixture in response to daylight.	\$0.34/Watt <u>\$0.34/Watt</u> controlled75/Sense f
	Advanced Daylighting Control	Must incorporate both an occupancy sensor and daylighting sensor operating as part of the same control sequence in the same <u>interior</u> space.	\$0.38/Watt <u>\$0.38/Watt</u> controlled150
	Dimming Ballast	Continuous, Stepped, or Bi-level ballast or automated control that dims 50% or more of the fixture. Must be controlled by a qualifying occupancy or daylighting control.	\$15/Ballast
Non-General Illuminance	Exit Sign	LED or photoluminescent replacing incandescent or fluorescent	\$15/Sign
	LED Message Center Sign	LED replacing existing incandescent signage	\$5/Lamp
	LED Channel Letter Sign	LED replacing existing neon or fluorescent signage	\$5/Linear Foot
	LED Marquee/Cabinet Sign	LED replacing existing fluorescent signage	\$5/Linear Foot
<u>Lighting</u>	<u>Custom</u>	<u>Not listed above</u>	<u>\$0.15/kWh annual energy savings</u>

Notes for retrofit lighting controls and non-general illuminance incentives

1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.
2. Incentives are capped at ~~50-70~~ percent of Energy Efficiency Project Costs and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy Efficiency Project Costs are subject to Company approval.
3. Incentives for Advanced Daylighting Controls may not be combined with other occupancy control or daylighting control incentives.
4. Watt controlled refers to the total wattage of lighting fixtures down circuit from the control.

PIR = Passive Infrared

Dual Tech = Sensors combining ultrasonic and passive infrared

LED = Light-emitting Diode

Incentives for new construction/major renovation lighting

Measure	Category	Eligibility Requirements	Incentive
Interior Lighting	Lighting and Lighting Control	<p>1. The total connected interior lighting power for New Construction/Major Renovation projects must be <u>at least</u> 10% lower than the interior lighting power allowance calculated under the applicable version of the state energy code. For New Construction/Major Renovation projects not included in the state energy code, the total connected lighting power must be 10% lower than common practice as determined by the Company.</p> <p>2. Energy savings is subject to approval by the Company.</p>	\$0.08/kWh annual energy savings
Exterior Lighting	Induction Fixture	All Wattages, New Fixtures Only	\$125 75/Fixture
	LED Outdoor Pole/Roadway, decorative LED Outdoor Area and Roadway	<u><75W; LED must be listed on qualified fixture equipment list</u>	\$100 75/Fixture
	<u>LED Outdoor Pole/Roadway</u>	<u><200W; LED must be listed on qualified equipment list</u>	<u>\$100/fixture</u>
		<u>>200W; LED must be listed on qualified equipment list</u>	<u>\$400/fixture</u>
	<u>LED Canopy/Soffit</u>	<u>LED must be listed on qualified equipment list</u>	<u>\$125/fixture</u>
	<u>LED Wall Packs</u>	<u><50 Watts; LED must be listed on qualified equipment list</u>	<u>\$50/fixture</u>
		<u>>50 Watts; LED must be listed on qualified equipment list</u>	<u>\$75/fixture</u>
	<u>LED Flood Lights</u>	<u><100 Watts; LED must be listed on qualified equipment list</u>	<u>\$75/fixture</u>
		<u>≥100 Watts; LED must be listed on qualified equipment list</u>	<u>\$150/fixture</u>
	CFL Wall Pack	All Wattages, Hardwire Fixtures Only	\$30/Fixture
	Lighting Control	<u>Occupancy control which must control a linear fluorescent, induction, or LED fixture</u> Integral occupancy sensor which must control a linear fluorescent, induction, or LED fixture. Sensor must be installed on a continuous duty light.	<u>\$0.30/Watt controlled</u> 75/sensor
	<u>Custom</u>	<u>Not listed above</u>	<u>\$0.08/kWh annual energy savings</u>

CFL = Compact Fluorescent Lamp
LED = Light-Emitting Diode

Incentives for Motors

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Customer Incentive
Electronically Commutated Motor	≤ 1 horsepower	Refrigeration application	--	\$0.50/watt
		HVAC application	--	\$50/horsepower
Variable-Frequency Drives (HVAC fans and pumps)	≤ 100 horsepower	HVAC fans and pumps	See Note 2	\$65/horsepower
Green Motor Rewinds	≥ 15 and ≤ 5,000 hp	--	Must meet GMPG Standards	\$1/horsepower Refer to Note 3

Notes for motor incentives:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
2. Throttling or bypass devices, such as inlet vanes, bypass dampers, three-way valves, or throttling valves must be removed or permanently disabled to qualify for HVAC fan or pump VFD incentives. VFDs required by or used to comply with the applicable version of the Idaho energy code are not eligible for incentives. Savings will only be realized for installations where a variable load is present.
3. For Green Motor Rewinds, the participating electric motor service center is paid \$2/horsepower for eligible Green Motor Rewinds. A minimum of \$1/horsepower is paid by the service center to the Customer as a credit on the motor rewind invoice. The balance is retained by the service center. Green Motor Rewind motors that are installed or placed in inventory may qualify for an incentive.

~~4. Incentives are not available for National Electrical Manufacturers Association (NEMA) Premium Efficiency Motors purchased on or after January 15, 2011.~~

ECM = Electronically Commutated Motor

GMPG = Green Motors Practices Group

HVAC = Heating, Ventilation and Air-Conditioning

~~NEMA = National Electrical Manufacturer's Association~~

VFD = Variable-Frequency Drive

Incentives for HVAC equipment

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement & Customer Incentive		
			\$25/ton	\$50/ton	\$75/ton
Unitary Commercial Air Conditioners, Air-Cooled (Cooling Mode)	< 65,000 Btu/hr (single phase)	Split system and single package	--	CEE Tier 1	CEE Tier 2
	All equipment sizes (three phase)	Split system and single package	--		
Unitary Commercial Air Conditioners, Water and Evaporatively Cooled	All equipment sizes	Split system and single package	--	CEE Tier 1	--
Packaged Terminal Air Conditioners (PTAC) (Heating & Cooling Mode)	≤ 8,000 Btu/hr	Single package	12.2 EER	--	--
	> 8,000 Btu/hr and < 10,500 Btu/hr	Single package	11.9 EER	--	--
	≥ 10,500 Btu/hr and ≤ 13,500 Btu/hr	Single package	10.7 EER	--	--
	> 13,500 Btu/hr	Single package	9.9 EER	--	--
Packaged Terminal Heat Pumps (PTHP) (Heating & Cooling Mode)	≤ 8,000 Btu/hr	Single package	--	12.2 EER and 3.4 COP	--
	> 8,000 Btu/hr and < 10,500 Btu/hr	Single package	--	11.5 EER and 3.3 COP	--
	≥ 10,500 Btu/hr and ≤ 13,500 Btu/hr	Single package	--	10.7 EER and 3.1 COP	--
	> 13,500 Btu/hr	Single package	--	9.8 EER and 3.0 COP	--
Heat Pumps, Air-Cooled (Cooling Mode)	< 65,000 Btu/hr (single & three phase)	Split system and single package	--	CEE Tier 1	CEE Tier 2
	≥ 65,000 Btu/hr (three phase)	Split system and single package	--	CEE Tier 1	--
Heat Pumps, Air-Cooled (Heating Mode) - See Note 3	< 65,000 Btu/hr (single & three phase)	Split system and single package	--	CEE Tier 1	CEE Tier 2
	≥ 65,000 Btu/hr (three phase)	47°F db/43°F wb outdoor air	--		--
		17°F db/15°F wb outdoor air	--		--
Heat Pumps, Water-Source (Cooling Mode)	< 135,000 Btu/hr	86°F Entering Water	--	CEE Tier 1	--
Heat Pumps, Water-Source (Heating Mode) - See Note 3	< 135,000 Btu/hr	68°F Entering Water	--	CEE Tier 1	--
<u>VRF Air-Cooled Heat Pumps (Cooling Mode)</u>	<u>All Equipment Sizes</u>	<u>Multisplit System or Multisplit System with Heat Recovery</u>			<u>CEE Tier 1</u>

<u>VRF Air-Cooled Heat Pumps (Heating Mode) See Note 3</u>	<u>All Equipment Sizes</u>	<u>Multisplit System or Multisplit System with Heat Recovery (See note 3)</u>			<u>CEE Tier 1</u>
<u>VRF Water-Cooled Heat Pumps (Cooling Mode)</u>	<u>< 135,000 Btu/hr</u>	<u>Multisplit System or Multisplit System with Heat Recovery</u>			<u>CEE Tier 1</u>
<u>VRF Water-Cooled Heat Pumps (Heating Mode) See Note 3</u>	<u>< 135,000 Btu/hr</u>	<u>Multisplit System or Multisplit System with Heat Recovery (See note 3)</u>			<u>CEE Tier 1</u>
Heat Pumps, Ground-Source or Groundwater-Source (Heating & Cooling Mode) - See Note 3	All sizes	77°F Entering Water	--	ENERGY STAR Qualified	--
Ground-Source or Groundwater-Source Heat Pump Loop	All sizes	--	\$25/ton	--	--

Notes for HVAC incentives:

1. Equipment that meets or exceeds the efficiency requirements listed for the size category in the above table may qualify for the listed incentive. Equipment must meet all listed efficiency requirements to qualify for the listed incentives.
2. PTHPs can replace electric resistive heating, which must be removed.
3. Incentives for heat pumps are available per ton of cooling capacity ONLY. No incentives are paid per ton of heating capacity. Heat pumps must meet both the cooling mode and heating mode efficiency requirements to qualify for per ton cooling efficiency incentives.
4. Equipment size categories are specified in terms of net cooling capacity at AHRI standard conditions as determined by AHRI Standard 210/240 for units <65,000 Btu/hr, AHRI Standard 340/360 for units ≥65,000 Btu/hr, and AHRI Standard 310/380 for PTAC and PTHP units, and AHRI Standard 1230 for VRF systems.
5. Ground and Water Source Heat Pumps must meet or exceed listed efficiency requirements when rated in accordance with ISO-13256-1 to qualify for the listed incentive.
6. Units rated only with an IPLV may qualify for the listed incentives if the value meets or exceeds the minimum IPLV established as part of the Consortium for Energy Efficiency Commercial Unitary Air-Conditioning and Heat Pump specification effective January 16, 2009.
7. Efficiency requirements align with the Unitary Air-Conditioning and Heat Pump Specification maintained by the Consortium for Energy Efficiency for equipment with heating sections other than electric resistance. CEE minimum efficiency requirements are listed on the Company website.

AHRI = Air-Conditioning, Heating and Refrigeration Institute
CEE = Consortium for Energy Efficiency
COP = Coefficient of Performance
EER = Energy Efficiency Ratio
HSPF = Heating Seasonal Performance Factor

HVAC = Heating, Ventilation and Air-Conditioning
IEER = Integrated Energy Efficiency Ratio
IPLV = Integrated Part Load Value
PTAC = Packaged Terminal Air Conditioner
PTHP = Packaged Terminal Heat Pump
SEER = Seasonal Energy Efficiency Ratio
VRF = Variable Refrigerant Flow

Incentives for other HVAC equipment

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Customer Incentive
Evaporative Cooling	All	Direct or Indirect		\$0.06/4SR CFM
Indirect-Direct Evaporative Cooling (IDEC)	All sizes		Applicable system components must exceed minimum efficiencies required by energy code	\$0.15/kWh annual energy savings \$0.12/kWh annual energy savings + \$50/kW (See note 2)
Chillers	All except chillers intended for backup service only	Served <u>Serving</u> primarily occupant comfort cooling loads (no more than 20% for process cooling loads)	Must exceed minimum efficiencies required energy code.	\$0.15/kWh annual energy savings \$0.12/kWh annual energy savings + \$50/kW See Note 3
Room Air Conditioner	Residential (used in a business)	See Home Energy Savings program	See Home Energy Savings program	See Note 5
365/366 Day Programmable or <u>Occupancy-based</u> Thermostat	All sizes in portable classrooms with mechanical cooling	Must be installed in portable classroom unoccupied during summer months	365/366 day thermostatic or <u>occupancy-based</u> setback capability	\$150/thermostat
Occupancy Based PTHP/PTAC control	All sizes with no prior occupancy based control		See note 54	\$50/controller
<u>Evaporative Pre-cooler (Retrofit Only)</u>		<u>For single air-cooled packaged rooftop or matched split system condensers only.</u>	<u>Minimum performance efficiency of 75%. Must have enthalpy controls to control pre-cooler operation. Water supply must have chemical or mechanical water treatment.</u>	<u>\$75/ton of attached cooling capacity</u>

Notes for other HVAC equipment incentives:

- Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- Incentives are paid at ~~\$0.12~~ \$0.15/kWh annual energy savings ~~+ \$50/kW average monthly demand savings~~. IDEC energy ~~and demand~~ savings are subject to approval by the Company.
- Incentives paid at ~~\$0.12~~ \$0.15/kWh annual energy savings ~~+ \$50/kW average monthly demand savings~~. Chiller energy ~~and demand~~ savings are subject to approval by the Company.

4. Controller units must include an occupancy ~~sensor-based control~~ and include the capability to set back the zone temperature during extended unoccupied periods and set up the temperature once the zone is occupied.
5. Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.

CFM = Cubic Feet per Minute

HVAC = Heating, Ventilating and Air-Conditioning

IDEC = Indirect-Direct Evaporative Cooling

PTAC = Packaged Terminal Air Conditioner

PTHP = Packaged Terminal Heat Pump

Incentives for building envelope (Retrofit)

Equipment Type	Category	Minimum Efficiency Requirement	Customer Incentive
Cool Roof	--	ENERGY STAR Qualified	\$0.10/square foot
Roof/Attic Insulation	--	Minimum increment of R-10 insulation added	\$0.09/square foot
Wall Insulation	--	Minimum increment of R-10 insulation added	\$0.07/square foot
Windows (See notes 3, 4)	Site-built	U-Factor ≤ 0.30 and SHGC ≤ 0.33 (glazing only rating)	\$0.35/square foot
	Assembly	U-Factor ≤ 0.30 and SHGC ≤ 0.33 (entire window assembly rating)	\$0.35/square foot
Window Film	Existing windows	See Note 5	\$0.12 <u>\$0.15/kWh</u> <u>annual energy</u> <u>savings</u> (See Note 5)

Notes for building envelope incentives (retrofit):

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
2. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.
3. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive incentives.
4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.
5. Incentives for window film are calculated based on film specifications and window orientation at ~~\$0.12~~ \$0.15/kWh annual energy savings. Energy savings subject to approval by the Company.

NFRC = National Fenestration Rating Council
SHGC = Solar Heat Gain Coefficient

Incentives for building envelope (New Construction/Major Renovation)

Equipment Type	Category	Minimum Efficiency Requirement	Customer Incentive
Cool Roof	--	ENERGY STAR Qualified	\$0.10/square foot
Roof/Attic Insulation	--	Minimum increment of R-5 insulation above code (See Note 5)	\$0.09/square foot
Wall Insulation	--	Minimum increment of R-3.7 continuous insulation above code (See Note 5)	\$0.07/square foot
Windows (See Notes 3, 4)	Site-built	U-Factor ≤ 0.30 and SHGC ≤ 0.33 (glazing only rating)	\$0.35/square foot
	Assembly	U-Factor ≤ 0.30 and SHGC ≤ 0.33 (entire window assembly rating)	\$0.35/square foot

Notes for building envelope incentives for New Construction/Major Renovation projects:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
2. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.
3. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive incentives.
4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.
5. Compliance with the minimum efficiency requirements of roof/attic and wall Insulation measures may be demonstrated with equivalent U-factors and are subject Company approval.

NFRC = National Fenestration Rating Council

SHGC = Solar Heat Gain Coefficient

Incentives for food service equipment

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Customer Incentive/Unit
Residential Dishwasher	Used in a business	See Home Energy Savings Program	See Note 2
Commercial Dishwasher (Electric Water Heating <u>High Temperature models w/electric boosters</u> Only) (See note 3)	Undercounter	ENERGY STAR Qualified	\$500-100
	Stationary rack, single tank, door type		\$1,000-400
	Single tank conveyor		\$1,500-1,000
	Multiple tank conveyor		\$2,000-500
Electric Insulated Holding Cabinet	Volume \geq 28 cu. ft.	ENERGY STAR Qualified	\$600-400
	$13 \leq$ Volume $<$ 28 cu. ft.		\$500-300
	Volume $<$ 13 cu. ft.		\$400-200
Electric Steam Cooker	3-, 4-, 5- and 6-pan or larger sizes - Tier 1	ENERGY STAR Qualified	\$750-130
	3-, 4-, 5- and 6-pan or larger sizes - Tier 2	ENERGY STAR Qualified w/ Heavy Load Efficiency \geq 65%, Idle Energy Rate \leq .23 kW (See Note 4)	\$840-300
Electric Convection Oven	--	ENERGY STAR Qualified >70% cooking efficiency (See Note 4)	\$350
Electric Griddle	Tier 1	ENERGY STAR Tier 1 Qualified	\$250
	Tier 2	ENERGY STAR Tier 2 Qualified	\$350-150
Electric Combination Oven	6-15 pans--	ENERGY STAR Qualified Heavy Load Efficiency \geq 70%, Idle Energy Rate \leq 3.5 kW (See Note 4)	\$1,000
	16 – 20 pans	ENERGY STAR Qualified	\$275
Electric Commercial Fryer	Tier 1	ENERGY STAR Qualified	\$200
	Tier 2	ENERGY STAR Qualified w/Cooking Efficiency \geq 86.6%, Idle Energy Rate \leq 772 Watts (See Note 4)	\$300
Ice Machines (Air-Cooled Only)	Tier 1: Harvest rate $<$ 500 lbs/day	ENERGY STAR Qualified	\$65-125
	Tier 1: Harvest rate \geq 500 lbs/day		\$175-150
	Tier 2: Harvest rate $<$ 500 lbs/day	CEE Tier 2 Qualified	\$130-250
	Tier 2: Harvest rate \geq 500 lbs/day		\$265-400
Residential Refrigerator	Used in a business	See Home Energy Savings Program	See Note 2
Residential Refrigerator/Freezer Recycling	Used in a business	See residential refrigerator/freezer recycling program	See Note 3
Commercial Glass <u>Transparent</u> Door Refrigerator	0 $<$ Volume $<$ 15 cu. ft.	ENERGY STAR Qualified	\$100-25
	$15 \leq$ Volume $<$ 30 cu. ft.		\$125-50
	$30 \leq$ Volume $<$ 50 cu. ft.		\$150-75

	Volume ≥ 50 cu. ft.		\$175 <u>\$125</u>
	Chest configuration		\$75 <u>\$50</u>
Commercial Glass <u>Transparent</u> Door Freezer	$0 < \text{Volume} < 15$ cu. ft.	ENERGY STAR Qualified	\$25 <u>\$300</u>
	$15 \leq \text{Volume} < 30$ cu. ft.		\$50 <u>\$325</u>
	$30 \leq \text{Volume} < 50$ cu. ft.		\$75 <u>\$375</u>
	Volume ≥ 50 cu. ft.		\$100 <u>\$800</u>
	Chest configuration		\$100
Commercial Solid Door Refrigerator	$0 < \text{Volume} < 15$ cu. ft.	ENERGY STAR Qualified	\$50
	$15 \leq \text{Volume} < 30$ cu. ft.		\$75
	$30 \leq \text{Volume} < 50$ cu. ft.		\$100
	Volume ≥ 50 cu. ft.		\$125
	Chest configuration		\$75
Commercial Solid Door Freezer	$0 < \text{Volume} < 15$ cu. ft.	ENERGY STAR Qualified	\$150
	$15 \leq \text{Volume} < 30$ cu. ft.		\$175
	$30 \leq \text{Volume} < 50$ cu. ft.		\$200
	Volume ≥ 50 cu. ft.		\$300
	Chest configuration		\$150
LED Case Lighting (Retrofit Only)	--	LED replacing fluorescent lamp in refrigerated cases.	\$10/linear foot
Refrigerated Case Occupancy Sensor (Retrofit Only)	--	Installed in existing refrigerated case with LED lighting	\$1/linear foot
<u>Demand Controlled Kitchen Ventilation Exhaust Hood (Retrofit Only)</u>	<u>Must be installed on commercial kitchen exhaust system.</u>	<u>Variable speed motors must be controlled to vary fan speed depending upon kitchen demand, as indicated by connected sensors.</u>	<u>\$0.15/kWh annual energy savings (See note 4)</u>
<u>Anti-Sweat Heater Controls (Retrofit Only)</u>	<u>Low-Temp (Freezing) Cases</u>	<u>Technologies that reduce energy consumption of anti-sweat heaters based on sensing humidity.</u>	<u>\$20/linear foot (case length)</u>
	<u>Med-Temp (Refrigerated) Cases</u>		<u>\$16/linear foot (case length)</u>

Notes for food service equipment incentives:

- Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.
- ~~Commercial Dishwashers must be supplied with electrically heated domestic hot water. Models with either electric or gas booster heaters are eligible for incentives.~~
- ~~To meet the Minimum Efficiency Requirement(s) listed, values must be based on testing in accordance with the applicable ASTM Standard Test Method.~~
3. Refer to the Company's residential refrigerator and freezer recycling program (See ya later, refrigerator®) for requirements and incentives for listed appliance recycling measures for residential appliances used in a business.
4. Incentives are paid at \$0.15/kWh annual energy savings. Demand controlled kitchen ventilation exhaust hood energy savings subject to approval by Company.

ASTM = American Society for Testing and Materials

CEE = Consortium for Energy Efficiency

MDEC = Maximum Daily Energy Consumption

V = Association of Home Appliance Manufacturers (AHAM) Volume (cubic feet)

Incentives for office equipment

Equipment Type	Minimum Efficiency Requirements	Customer Incentive
Network PC Power Management Software	1. Installed software must automatically control the power settings of networked personal computers (PC) at the server level 2. The software must manage power consumption for each individual PC 3. The software must include the capability to report energy savings results <u>4. Incentives are for desktop computers only. Controlled laptop computers are not eligible for incentives.</u>	\$7.5 per controlled PC (up to 100% of Energy Efficiency Measure costs)
Smart Plug Strip	1. Incentive applies to any plug strip that eliminates idle or stand-by power consumption of connected plug-load appliance through the use of an occupancy sensor, electric load sensor, or timer. 2. Applies only to electric plug-load applications (e.g. computer monitors, desk lamps, etc.)	\$15/qualifying unit

Notes for office equipment incentives:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

~~2. Energy Efficiency Measure Costs for Network PC Power Management Software are subject to Company approval.~~

PC = Personal Computer

Incentives for appliances

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Customer Incentive
High-Efficiency Clothes Washer	Residential (used in a business)	See Home Energy Savings program	See Note 3
	Commercial (must have electric water heating)	ENERGY STAR Qualified	\$150-100
		CEE Tier 2 Qualified	\$200
Electric Water Heater	Residential (used in a business)	See Home Energy Savings program	See Note 3

Notes for appliance incentives:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
2. Equipment must meet the efficiency rating standard that is in effect on the date of purchase.
3. Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.

~~CEE = Consortium for Energy Efficiency~~

Incentives for Incentives for Farm and Dairy dairy/farm-eEquipment

Equipment Type	Equipment Category	Minimum Efficiency Requirements	Customer Incentive
Automatic Milker Takeoffs (Retrofit o Only)	--	Equipment must be able to sense milk flow and remove milker when flow reaches a pre-set level. The vacuum pump serving the affected milking units must be equipped with a VFD, to slow the vacuum pump's speed when demand for vacuum is reduced. Incentive <u>is</u> available for <u>adding automatic milker takeoffs to existing milking systems, not for takeoffs on a brand new system where there was none before, retrofit only.</u> Replacement of existing automatic milker takeoffs is not eligible for <u>this listed incentive, but may qualify for a Custom Energy Efficiency Incentive, incentives, except where the Company permits as a custom energy efficiency incentive.</u>	\$235 each
Agricultural Engine Block Heater Timers	--	Timer must be a UL-listed device and rated for a minimum of 15 amps continuous duty.	\$10 each
<u>High Efficiency</u> Circulating Fans (See note 2)	12-23" Diameter	Fans must achieve an efficiency level of 11 cfm/ watt Watt	\$25/fan
	24-35" Diameter	Fans must achieve an efficiency level of 18 cfm/ watt Watt	\$35/fan
	36-47" Diameter	Fans must achieve an efficiency level of 18 cfm/ watt Watt	\$50/fan
	≥48" Diameter	Fans must achieve an efficiency level of 25 cfm/ watt Watt	\$75/fan
Heat <u>Recovery</u> Reclaimers	--	Heat reclaimer recovery unit must use waste heat rejected from milk cooling refrigeration system compressor to heat water. Customer must use electricity for water heating to heat water.	\$220/condenser <u>kW\$0.15/kWh</u> <u>annual energy savings</u>
High-efficiency L ivestock <u>W</u> aterers	--	Must have two inches or more of insulation surrounding the inside of the waterer and an electric heating element. Those Waterers with a heating element greater than 250 watts must have an adjustable thermostat. Non-electric waterers do not qualify.	\$165 each
High- e fficiency Ventilation <u>F</u> anSystems (See note 2)	12-23" Diameter	Fans must achieve an efficiency level of 11 cfm/ w Watt	\$45/fan
	24-35" Diameter	Fans must achieve an efficiency level of 13 cfm/ w Watt	\$75/fan
	36-47" Diameter	Fans must achieve an efficiency level of 17 cfm/ w Watt	\$125/fan
	≥48" Diameter	Fans must achieve an efficiency level of 19.5 cfm/ w Watt	\$150/fan

Milk Pre-coolers	--	The equipment must cool milk with well-water before it reaches the bulk cooling tank.	\$0.15/kWh annual energy savings (See Note 3)
Programmable Ventilation Controllers	--	The controllerequipment must control ventilation fans based on temperature or other applicable factors such as humidity, odor concentration, etc.	\$20/fan controlled
Variable Frequency Drives for Dairy Vacuum Pumps (Retrofit only)	--	VFDThe equipment must vary the motor speed based on target vacuum level, in accordance with the air flow needs of the vacuum system. Incentive available for retrofit only (i.e. new construction and replacement of existing VFD not eligible.)for systems without an existing VFD.	\$165/hp
<u>Potato or onion storage fan VFD</u>		<u>Add variable frequency drive to existing or new fan in potato or onion storage.</u>	<u>\$0.15/kWh annual energy savings</u>

Notes for Farm and Dairy ~~dairy/farm~~ equipment incentives:

1. Equipment that meets or exceeds the efficiency requirements ~~listed for the equipment category in the above table~~ may qualify for the listed incentive.
2. Fan performance must be rated by an independent testing body in accordance with the appropriate ANSI/AMCA standards.
3. ~~Milk Pre-cooler incentives are paid at \$0.15/kWh annual energy savings. Energy savings subject to approval by the Company. Incentives are capped at 70 percent of Energy Efficiency Project Costs, and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.~~
4. Except where noted, all equipment listed in the table ~~is~~will be eligible for incentives in both ~~n~~New C construction and ~~r~~Retrofit projects.

AMCA = Air Movement and Control Association International, Inc.

ANSI = American National Standards Institute

VFD = Variable-Frequency Drive

cfm = cubic feet per minute

w = watt

Incentives for Compressed Air Equipment

Equipment Category	Replace	With	Limitations	Unit	Customer Incentive
Low-Pressure Drop Filters	Standard coalescing filter	Rated low-pressure drop filter where: 1. Pressure loss at rated flow is ≤ 1 psi when new and ≤ 3 psi at element change. 2. Particulate filtration is 100% at ≥ 3.0 microns and 99.98% at 0.1 to 3.0 microns, with ≤ 5 ppm liquid carryover. 3. Filter is deep-bed "mist eliminator" style, with element life ≥ 5 years. 4. Rated capacity of filter is ≤ 500 scfm.	1. Compressor system must be ≥ 25 hp and ≤ 75 hp. 2. <u>Compressor discharge pressure setpoint must be reduced by 2 psi or more after installation of low pressure drop filter.</u>	scfm	\$0.80 /scfm
Receiver Capacity Addition	Limited or no receiver capacity (≤ 2 gallons per scfm of trim compressor capacity)	Total rank receiver capacity after addition must be > 2 gallons per scfm of trim compressor capacity	1. Compressor system size ≤ 75 hp, <u>not counting backup compressor(s).</u> 2. Trim compressor must use load/unload control, <u>not without</u> inlet modulation or on/off control. 3. Systems with a -VFD <u>compressor</u> or using variable displacement <u>compressor as trim compressor control on trim compressor</u> are not eligible.	gal	\$13.50 /gallon above 2 gallons <u>per</u> scfm
<u>Cycling Refrigerated</u> Cycling Dryers	Non-cycling refrigerated dryer	Cycling refrigerated dryer	1. Compressor system size ≤ 75 hp. 2. Rated dryer capacity must be ≤ 500 scfm. 3. Dryer must operate exclusively in cycling mode and cannot be equipped with the ability to select between cycling and non-cycling mode. 4. Refrigeration compressor must cycle off during periods of reduced demand.	scfm	\$21.50 /scfm
VFD Controlled Compressor	Compressor 75 hp or smaller <u>Fixed speed compressor</u>	<u>≤ 75 hp VFD controlled oil-injected screw compressor operating in system with total compressor capacity ≤ 75 hp, not counting backup compressor capacity ≤ 75 hp</u> single operating VFD-controlled oil-injected screw compressor	1. <u>Total compressor capacity in upgraded system is ≤ 75 hp, not counting backup compressor.</u> Single operating compressor ≤ 75 hp. 2. Compressor must adjust speed as primary means of capacity control.	hp	\$0.15/kWh annual energy savings (See note 3)

			3. Compressor must not use inlet modulation when demand is below minimum speed threshold of the VFD compressor.		
Zero Loss Condensate Drains	Fixed Timer drain	Zero loss condensate drain (See note 4)	Drain is designed to function without release of compressed air into the atmosphere. <u>Any size system is eligible – there is no restriction on compressor size. – (all compressor sizes).</u>	each	\$9 100 each
Outside Air Intake	Compressor <u>drawing</u> intake drawing air from compressor room	<u>Permanent ductwork between compressor air intake and outdoors</u> ≤ 75 hp compressor where permanent ductwork between compressor air intake and outdoors	1. Compressor system size ≤ 75 hp. 2. Ductwork must meet manufacturer's specifications, which may include: (a) ≤ 0.25" W.C. pressure loss at rated flow, and (b) allow use of compressor room air during extremely cold <u>outside</u> air conditions.	hp	\$6.00/hp
<u>Compressed air end use reduction</u>	<u>Inappropriate or inefficient compressed air end use</u>	<u>Functionally equivalent alternatives or isolation valves</u>	<u>Any size system is eligible – there is no restriction on compressor size.</u>		<u>\$0.15/kWh annual energy savings</u>

Notes for Compressed Air incentives:

- 1.- Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive. Eligibility for the above energy efficiency incentives, except zero loss condensate drains and VFD-controlled compressors, is limited to customers with compressed air system(s) containing compressors with a total system horsepower less than or equal to 75 hp in size.
- 2.- Except for the zero loss condensate drain and compressed air end use reduction measures, eligibility for incentives is limited to compressed air systems with total compressor capacity of 75 hp or less, not including backup compressor capacity that does not normally run. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 3.- Incentives are capped at 70 percent of Energy Efficiency Project Costs, and incentives will not be available to reduce Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.
for VFD-controlled compressors are calculated based on compressor size and other system parameters at \$0.15/kWh annual energy savings. Energy savings is subject to approval by the Company.
- 4.- Zero loss condensate drains purchased as an integral part of another measure are eligible for the incentive shown above. loss condensate drains purchased as requirements for other compressed air energy efficiency measures are eligible for incentives.

hp = horsepower
ppm = parts per million

psi = pounds per square inch

scfm = ~~c~~Cubic ~~F~~feet of air per ~~M~~minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity)

VFD = ~~V~~variable ~~F~~frequency ~~D~~rive

Incentives for Wastewater and Other Refrigeration Energy Efficiency Measures

<u>Equipment Type</u>	<u>Replace</u>	<u>With</u>	<u>Customer Incentive</u>
<u>Adaptive refrigeration control</u>	<u>Conventional controls (defrost timeclock, space thermostat, evaporator fan control, if any, thermal expansion valve in some instances)</u>	<u>Adaptive refrigeration controller and, in some instances, electric expansion valve</u>	<u>\$0.15/kWh annual energy savings</u>
<u>Fast acting door</u>	<u>Manually operated door, automatic door with long cycle time, strip curtain, or entryway with no door in refrigerated/conditioned space</u>	<u>Fast acting door</u>	<u>\$0.15/kWh annual energy savings</u>
<u>Wastewater – low power mixer</u>	<u>Excess aeration capacity</u>	<u>Extended range circulator</u>	<u>\$0.15/kWh annual energy savings</u>

Notes for other energy efficiency measures incentives table

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.
2. Incentives are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

Enhanced Incentives for Small Businesses (Retrofit only)⁸

<u>Measure</u>	<u>Category</u>	<u>Eligibility Requirements</u>	<u>Maximum Incentive⁹</u>
<u>T8 Fluorescent</u>	<u>Retrofit (Lamp/Ballast)</u>	<u>4' CEE Qualified Reduced Wattage Lamp and CEE Qualified Ballast included on qualified ballast list</u>	<u>\$140/Fixture</u>
	<u>Delamp</u>	<u>4' CEE Qualified Reduced Wattage or High Performance Lamp and CEE Qualified Ballast. Must remove one or more lamps. To delamp an existing fixture, the lamp and all corresponding sockets must be permanently disabled.</u>	<u>\$120/Fixture</u>
	<u>T12 Conversion (Kit/Lamp/Ballast)</u>	<u>8' T12 to (2) 4' CEE Qualified Reduced Wattage or High Performance T8 Lamps and CEE Qualified Ballast.</u>	<u>\$150/Fixture</u>
	<u>Relamp</u>	<u>Lamp wattage reduction \geq 3 Watts. No ballast retrofit</u>	<u>\$15/Lamp Installed</u>
	<u>Replacement – High Bay (Fixture/Lamp/Ballast)</u>	<u>Fixture with less than six (6) lamps: 4' CEE Qualified High Performance Lamp. Must replace T12HO/VHO, Incandescent or HID</u>	<u>\$300/Fixture</u>
		<u>Fixture with six (6) or more lamps: 4' CEE Qualified High Performance Lamp. Must replace T12HO/VHO, Incandescent or HID</u>	<u>\$350/Fixture</u>
<u>T5 Fluorescent</u>	<u>Replacement – T5 Standard (Fixture/Lamp/Ballast)</u>	<u>4' Nominal Lamp \leq 28 Watts. Ballast Factor \leq 1.0</u>	<u>\$250/Fixture</u>
	<u>Relamp</u>	<u>Lamp wattage reduction \geq 3 Watts. No ballast retrofit</u>	<u>\$22/Lamp Installed</u>
	<u>Replacement – High Bay (Fixture/Lamp/Ballast)</u>	<u>Fixture with less than six (6) lamps: Must replace T12HO/VHO, Incandescent or HID</u>	<u>\$375/Fixture</u>
		<u>Fixture with six (6) or more lamps: Must replace T12HO/VHO, Incandescent or HID</u>	<u>\$450/Fixture</u>
<u>LED</u>	<u>Replacement/Retrofit - Recessed Downlight (Fixture or Kit)</u>	<u>Must replace existing incandescent or fluorescent. LED must be listed on qualified equipment list</u>	<u>\$150/Fixture</u>
	<u>Replacement - Exit Signs</u>	<u>Must replace incandescent or fluorescent</u>	<u>\$100/Sign</u>
<u>Lighting Control</u>	<u>Wall Occupancy Sensor Retrofit</u>	<u>PIR, Dual Tech</u>	<u>\$100/Sensor</u>
	<u>Ceiling Occupancy Sensor Retrofit</u>	<u>PIR, Dual Tech</u>	<u>\$220/Sensor</u>

Notes for enhanced incentives for small business customers:

- 1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.**
- 2. Incentives are capped at 80 percent of Energy Efficiency Project Costs. Energy Efficiency Project Costs are subject to Company approval.**
- 3. Incentives for T8 Fluorescent Premium Delamps may not be combined with other linear fluorescent lamp or fixture incentives. Complete fixture removals are not eligible.**
- 4. Incentives for T8 and T5 Fluorescent Relamps may not be combined with other linear fluorescent lamp or fixture incentives and will only be paid once per facility.**

⁸ Incentives for measures in this table are available only to Small Business customers as defined in the incentives table on page 2.

⁹ Actual incentives are subject to change and will be determined by Company on a component level basis on no less than an annual basis, will not exceed the values in this table, and will be posted on the Company website.

5. Qualified equipment lists referenced in the above table are posted on the Idaho energy efficiency program section of the Company's website.

BF = Ballast Factor

CEE = Consortium for Energy Efficiency

CFL = Compact Fluorescent Lamp

CMH = Ceramic Metal Halide

HID = High Intensity Discharge (e.g. Mercury Vapor, High Pressure Sodium, Metal Halide)

HO = High Output

LED = Light-Emitting Diode

PSMH = Pulse-Start Metal Halide

VHO = Very High Output

Case No. PAC-E-14-08
Exhibit No. 2
Witness: Kathryn C. Hymas

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Testimony of Kathryn C. Hymas

Idaho Three-Year Business Plan Cost Effectiveness

August 2014



MEMORANDUM

To: Don Jones, Jr.
From: Brian Hedman and Byron Boyle
Subject: Idaho Three-Year Business Plan Cost-Effectiveness
Date: August 8, 2014

The tables below present the cost-effectiveness findings of the Idaho Three-Year Business Plan based on costs and savings estimates provided by PacifiCorp in a spreadsheet entitled "Copy of CE inputs for ID WSB filing 051914+ updates 061614+ REV 062614.xlsx" and in an email from Don Jones, Jr. on June 26, 2014. The utility discount rate is from the 2013 PacifiCorp Integrated Resource Plan.

Three-year cost-effectiveness inputs and results for the business-as-usual program, increased incentives, energy management, paying for commissioning, two commercial measure categories, six industrial measure categories, and the portfolio combined are presented in this memo. Business-as-usual includes the impacts of energy codes and lighting baseline adjustments. The Business Plan Portfolio includes the impacts of Energy Project Manager Co-funding.

1. Business Plan Portfolio 2015-2017: Numbers 2 – 15 combined (Table 15)
2. Business-as-Usual 2015-2017 (Table 19)
3. Increase EF 2015-2017 (Table 23)
4. Increase Agriculture System Re-design 2015-2017 (Table 27)
5. Energy Management Offer 2015-2017 (Table 31)
6. Pay for Commissioning 2015-2017 (Table 35)
7. Commercial Food Service 2015-2017 (Table 39)
8. Commercial HVAC 2015-2017 (Table 43)
9. Industrial Compressed Air 2015-2017 (Table 47)
10. Industrial Potato Storage Fan VFD 2015-2017 (Table 51)
11. Industrial Adaptive Refrigeration Control 2015-2017 (Table 55)
12. Industrial Fast Acting Door 2015-2017 (Table 59)
13. Industrial End Use Compressed Air Reduction 2015-2017 (Table 63)
14. Industrial Wastewater Mixing – Grid Bee 2015-2017 (Table 67)
15. Small Business 2015-2017 (Table 71)

For all measures, cost-effectiveness was tested using the 2013 IRP 70% load factor east system decrements. Table 1 lists modeling inputs.

Inflation Rate¹	1.90%
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¹ Future rates determined using a 1.9% annual escalator.

Table 2,

Table 3,

Table 5,

Table 4, and Table 6 list the costs and incentives and Table 7,

Table 8, Table 9, and

Table 10 list the annual energy savings for each measure group. The following tables present the cost effectiveness results. Table 11 presents the three year summary of the benefit cost ratios for each of the categories. Tables 12-71 present the individual cost benefit analysis for each category by year and in total. All values in Tables 12-71 are shown in 2015 dollars.

Table 11 provides a comparative summary of the benefit/cost ratios from the individual measure category, program, and portfolio results, from all five test perspectives. Table 12 to Table 71 show the complete cost-effectiveness results by measure category, program, and portfolio.

The combined three-year portfolio is cost-effective from all test perspectives except the RIM. The energy management offer is the only measure not cost-effective from both the PTRC and TRC perspectives.

Table 1. ID Three-Year Business Plan: Financial Inputs

Parameter	Value
Discount Rate	6.88%
Irrigation Line Loss	11.45%
Commercial Line Loss	10.75%
Industrial Line Loss	7.52%
Irrigation Energy Rate (\$/kWh) – 2013 base rate	\$0.0898
Commercial Energy Rate (\$/kWh) - 2013 base rate	\$0.0885
Industrial (no Irrigation) Energy Rate (\$/kWh) – 2013 base rate	\$0.0608
Industrial (with Irrigation) Energy Rate (\$/kWh) - 2013 base rate	\$0.0689
Inflation Rate ¹	1.90%

¹ Future rates determined using a 1.9% annual escalator.

Table 2. ID Three-Year Business Plan: Business-as-Usual Program Costs

Measure	Year	Utility Admin	Incentives	Total Utility Costs	Participant Incremental Cost
BAU Commercial	1	\$85,479	\$204,256	\$289,735	\$604,841
	2	\$85,479	\$204,256	\$289,735	\$604,841
	3	\$85,479	\$204,256	\$289,735	\$604,841
BAU Industrial	1	\$243,287	\$581,344	\$824,632	\$1,721,470
	2	\$243,287	\$581,344	\$824,632	\$1,721,470
	3	\$243,287	\$581,344	\$824,632	\$1,721,470
Increase EF Commercial	1	\$1,172	\$17,335	\$18,508	\$4,629
	2	\$1,172	\$17,335	\$18,508	\$4,629
	3	\$1,172	\$17,335	\$18,508	\$4,629
Increase EF Industrial	1	\$3,336	\$49,339	\$52,676	\$13,174
	2	\$3,336	\$49,339	\$52,676	\$13,174
	3	\$3,336	\$49,339	\$52,676	\$13,174
Increase Agriculture	1	\$7,994	\$68,711	\$76,704	\$44,116

System Re-design Agricultural	2	\$7,994	\$68,711	\$76,704	\$44,116
	3	\$7,994	\$68,711	\$76,704	\$44,116

Measure	Year	Utility Admin	Incentives	Total Utility Costs	Participant Incremental Cost
Energy Management Offer Commercial	1	\$4,876	\$718	\$5,594	\$2,581
	2	\$11,687	\$1,588	\$13,275	\$5,441
	3	\$23,765	\$3,071	\$26,836	\$10,255
Energy Management Offer Industrial	1	\$13,878	\$2,044	\$15,922	\$7,345
	2	\$33,262	\$4,519	\$37,782	\$15,486
	3	\$67,640	\$8,741	\$76,381	\$29,188
Pay for Commissioning Commercial	1	\$2,134	\$4,753	\$6,887	\$11,204
	2	\$2,134	\$4,753	\$6,887	\$11,204
	3	\$2,134	\$4,753	\$6,887	\$11,204
Pay for Commissioning Industrial	1	\$6,074	\$13,527	\$19,600	\$31,887
	2	\$6,074	\$13,527	\$19,600	\$31,887
	3	\$6,074	\$13,527	\$19,600	\$31,887

Table 3. ID Three-Year Business Plan: Commercial Program Costs

Measure	Year	Utility Admin	Incentives	Total Utility Costs	Participant Incremental Cost
Food Service	1	\$3,015	(\$2,066)	\$949	(\$4,178)
	2	\$3,052	(\$2,009)	\$1,043	(\$3,953)
	3	\$3,682	(\$471)	\$3,211	\$6,278
HVAC	1	\$2,148	\$4,695	\$6,843	\$19,302
	2	\$2,253	\$5,060	\$7,313	\$20,258
	3	\$2,377	\$5,503	\$7,880	\$21,398

Table 4. ID Three-Year Business Plan: Industrial Program Costs

Measure	Year	Utility Admin	Incentives	Total Utility Costs	Participant Incremental Cost
Compressed Air	1	\$1,800	\$3,000	\$4,800	\$7,220
	2	\$1,800	\$3,000	\$4,800	\$7,220
	3	\$1,800	\$3,000	\$4,800	\$7,220
Potato Storage Fan VFD	1	\$2,790	\$4,650	\$7,440	\$9,900
	2	\$2,790	\$4,650	\$7,440	\$9,900
	3	\$2,790	\$4,650	\$7,440	\$9,900
Adaptive Refrigeration Control	1	\$2,520	\$3,900	\$6,420	\$9,400
	2	\$3,600	\$5,700	\$9,300	\$15,800
	3	\$4,140	\$6,600	\$10,740	\$19,000
Fast Acting Door	1	\$2,880	\$4,800	\$7,680	\$18,000
	2	\$2,880	\$4,800	\$7,680	\$18,000
	3	\$2,880	\$4,800	\$7,680	\$18,000
End Use Compressed Air Reduction	1	\$900	\$1,500	\$2,400	\$2,500
	2	\$900	\$1,500	\$2,400	\$2,500
	3	\$900	\$1,500	\$2,400	\$2,500
Wastewater Mixing – Grid Bee	1	\$7,200	\$12,000	\$19,200	\$35,000
	2	\$7,200	\$12,000	\$19,200	\$35,000
	3	\$7,200	\$12,000	\$19,200	\$35,000

Table 5. ID Three-Year Business Plan: Small Business Costs

Measure	Year	Utility Admin	Incentives	Total Utility Costs	Participant Incremental Cost
Small Business	1	\$31,053	\$53,334	\$84,387	\$66,668
	2	\$84,092	\$236,195	\$320,287	\$295,244
	3	\$123,782	\$388,579	\$512,361	\$485,724

Table 6. ID Three-Year Business Plan: Portfolio Costs

Measure	Year	Total Utility Costs
Energy Project Manager Co-Funding	1	\$25,000
	2	\$50,000
	3	\$50,000

Table 7. ID Three-Year Business Plan:

Annual Savings by Measure Type for Business-as-Usual Measures

Measure	Year	Gross KWh Savings	Realization Rate	Adjusted KWh Savings	Net-to-Gross Percentage	Net KWh Savings	Measure Life
BAU Commercial	1	1,714,569	97%	1,670,892	78%	1,311,614	11
	2	1,714,569	97%	1,670,892	78%	1,311,614	11
	3	1,714,569	97%	1,670,892	78%	1,311,614	11
BAU Industrial	1	4,879,927	97%	4,755,615	78%	3,733,054	11
	2	4,879,927	97%	4,755,615	78%	3,733,054	11
	3	4,879,927	97%	4,755,615	78%	3,733,054	11
Increase EF Commercial	1	21,726	83%	18,033	89%	16,049	15
	2	21,726	83%	18,033	89%	16,049	15
	3	21,726	83%	18,033	89%	16,049	15
Increase EF Industrial	1	61,836	83%	51,323	89%	45,678	15
	2	61,836	83%	51,323	89%	45,678	15
	3	61,836	83%	51,323	89%	45,678	15
Increase Agriculture System Re-design	1	133,431	100%	133,431	93%	124,091	7
	2	133,431	100%	133,431	93%	124,091	7
	3	133,431	100%	133,431	93%	124,091	7
Energy Management Offer Commercial	1	35,900	100%	35,900	90%	32,336	3
	2	77,912	100%	77,912	90%	70,178	3
	3	147,878	100%	147,878	90%	133,198	3
Energy Management Offer Industrial	1	102,177	100%	102,177	90%	92,034	3
	2	221,749	100%	221,749	90%	199,736	3
	3	420,883	100%	420,883	90%	379,103	3
Pay for Commissioning Commercial	1	46,116	83%	38,276	89%	34,066	15
	2	46,116	83%	38,276	89%	34,066	15
	3	46,116	83%	38,276	89%	34,066	15
Pay for Commissioning Industrial	1	131,254	83%	108,940	89%	96,957	15
	2	131,254	83%	108,940	89%	96,957	15
	3	131,254	83%	108,940	89%	96,957	15

Table 8. ID Three-Year Business Plan:

Annual Savings by Measure Type for Commercial Measures

Measure	Year	Gross KWh Savings	Realization Rate ¹	Adjusted KWh Savings	Net-to-Gross Percentage	Net KWh Savings	Measure Life
Food Service	1	50,247	101%	50,749	67%	34,002	12
	2	50,863	101%	51,372	67%	34,419	12
	3	61,368	101%	61,982	67%	41,528	12
HVAC	1	35,802	101%	36,160	67%	24,227	12
	2	37,554	101%	37,929	67%	25,413	12
	3	39,622	101%	40,018	67%	26,812	12

Table 9. ID Three-Year Business Plan: Annual Savings by Industrial Measure Category

Measure	Year	Gross KWh Savings	Realization Rate	Adjusted KWh Savings	Net-to-Gross Percentage	Net KWh Savings	Measure Life
Compressed Air	1	20,000	83%	16,600	89%	14,774	15
	2	20,000	83%	16,600	89%	14,774	15
	3	20,000	83%	16,600	89%	14,774	15
Potato Storage Fan VFD	1	31,000	83%	25,730	89%	22,900	15
	2	31,000	83%	25,730	89%	22,900	15
	3	31,000	83%	25,730	89%	22,900	15
Adaptive Refrigeration Control	1	28,000	83%	23,240	89%	20,684	15
	2	40,000	83%	33,200	89%	29,548	15
	3	46,000	83%	38,180	89%	33,980	15
Fast Acting Door	1	32,000	83%	26,560	89%	23,638	15
	2	32,000	83%	26,560	89%	23,638	15
	3	32,000	83%	26,560	89%	23,638	15
End Use Compressed Air Reduction	1	10,000	83%	8,300	89%	7,387	10
	2	10,000	83%	8,300	89%	7,387	10
	3	10,000	83%	8,300	89%	7,387	10
Wastewater Mixing – Grid Bee	1	80,000	83%	66,400	89%	59,096	15
	2	80,000	83%	66,400	89%	59,096	15
	3	80,000	83%	66,400	89%	59,096	15

Table 10. ID Three-Year Business Plan: Annual Savings by Small Business

Measure	Year	Gross KWh Savings	Realization Rate	Adjusted KWh Savings	Net-to-Gross Percentage	Net KWh Savings	Measure Life
Small Business	1	133,336	101%	134,669	90%	121,202	12
	2	590,488	101%	596,393	90%	536,754	12
	3	971,448	101%	981,162	90%	883,046	12

The following tables present the cost effectiveness results. Table 11 presents the three year summary of the benefit cost ratios for each of the categories. Tables 12-71 present the individual cost benefit analysis for each category by year and in total. All values in Tables 12-71 are shown in 2015 dollars.

Table 11. ID Three-Year Business Plan: Benefit/Cost Ratios by Measure Category

Measure	PTRC	TRC	UCT	RIM	PCT
Business-as-Usual	1.69	1.54	2.97	0.73	2.21
Increase EF ¹	2.78	2.53	0.72	0.43	6.76
Agriculture System Re-design ²	1.41	1.28	0.82	0.43	3.27
Energy Management Offer	0.89	0.81	1.01	0.49	3.21
Pay for Commissioning	2.58	2.35	4.13	0.85	3.07
Commercial Food Service	10.83	9.85	15.60	0.79	0.00
Commercial HVAC	1.27	1.15	2.50	0.63	1.86
Industrial Compressed Air	1.64	1.49	2.55	0.81	2.01
Industrial Potato Storage Fan VFD	1.80	1.63	2.55	0.81	2.27
Industrial Adaptive Refrigeration Control	1.56	1.42	2.65	0.83	1.86
Industrial Fast Acting Door	1.14	1.04	2.55	0.81	1.29
Industrial End Use Compressed Air Reduction	1.55	1.41	1.83	0.71	2.31
Industrial Wastewater Mixing – Grid Bee	1.40	1.28	2.55	0.81	1.66
Small Business	1.24	1.13	1.23	0.50	2.55
Business Plan Portfolio	1.61	1.46	2.37	0.69	2.31

¹ PacifiCorp is proposing increased incentives and outreach costs for the Increase EF and Agriculture System Re-design programs. The increased incentive applies to all participants, including those whose savings is reflected in the Business-as-Usual scenario. As a consequence, the increased incentive and outreach costs are disproportionately higher than the utility specific savings on an incremental basis. This results in a UCT less than 1.0. This result is not indicative of the cost effectiveness of the programs in their entirety.

² See footnote 1

Table 12. ID Three-Year Business Plan: Portfolio Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.050	\$2,520,935	\$4,022,318	\$1,501,383	1.60
Total Resource Cost Test (TRC) No Adder	\$0.050	\$2,520,935	\$3,656,653	\$1,135,718	1.45
Utility Cost Test (UCT)	\$0.029	\$1,475,377	\$3,656,653	\$2,181,276	2.48
Rate Impact Test (RIM)		\$5,322,178	\$3,656,653	(\$1,665,525)	0.69
Participant Cost Test (PCT)		\$2,605,057	\$5,867,669	\$3,262,611	2.25
Discounted Participant Payback (years)	3.00				
Lifecycle Revenue Impact (\$/KWh)	\$0.00004791				

Table 13. ID Three-Year Business Plan: Portfolio Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.052	\$2,665,094	\$4,269,380	\$1,604,286	1.60
Total Resource Cost Test (TRC) No Adder	\$0.052	\$2,665,094	\$3,881,255	\$1,216,161	1.46
Utility Cost Test (UCT)	\$0.032	\$1,655,340	\$3,881,255	\$2,225,915	2.34
Rate Impact Test (RIM)		\$5,691,625	\$3,881,255	(\$1,810,370)	0.68
Participant Cost Test (PCT)		\$2,668,565	\$6,162,495	\$3,493,930	2.31
Discounted Participant Payback (years)	3.77				
Lifecycle Revenue Impact (\$/KWh)	\$0.00005009				

Table 14. ID Three-Year Business Plan: Portfolio Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.053	\$2,743,863	\$4,485,899	\$1,742,036	1.63
Total Resource Cost Test (TRC) No Adder	\$0.053	\$2,743,863	\$4,078,090	\$1,334,227	1.49
Utility Cost Test (UCT)	\$0.034	\$1,766,205	\$4,078,090	\$2,311,885	2.31
Rate Impact Test (RIM)		\$5,932,859	\$4,078,090	(\$1,854,769)	0.69
Participant Cost Test (PCT)		\$2,692,444	\$6,352,309	\$3,659,865	2.36
Discounted Participant Payback (years)	4.58				
Lifecycle Revenue Impact (\$/KWh)	\$0.00004953				

Table 15. ID Three-Year Business Plan: Portfolio Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.051	\$7,929,892	\$12,777,597	\$4,847,705	1.61
Total Resource Cost Test (TRC) No Adder	\$0.051	\$7,929,892	\$11,615,997	\$3,686,105	1.46
Utility Cost Test (UCT)	\$0.032	\$4,896,922	\$11,615,997	\$6,719,075	2.37
Rate Impact Test (RIM)		\$16,946,662	\$11,615,997	(\$5,330,665)	0.69
Participant Cost Test (PCT)		\$7,966,067	\$18,382,473	\$10,416,406	2.31
Discounted Participant Payback (years)	3.82				
Lifecycle Revenue Impact (\$/KWh)	\$0.00014235				

Table 16. ID Three-Year Business Plan: Business-as-Usual Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.049	\$2,154,870	\$3,495,312	\$1,340,443	1.62
Total Resource Cost Test (TRC) No Adder	\$0.049	\$2,154,870	\$3,177,557	\$1,022,687	1.47
Utility Cost Test (UCT)	\$0.025	\$1,114,367	\$3,177,557	\$2,063,190	2.85
Rate Impact Test (RIM)		\$4,469,806	\$3,177,557	(\$1,292,249)	0.71
Participant Cost Test (PCT)		\$2,326,311	\$5,060,163	\$2,733,853	2.18
Discounted Participant Payback (years)	3.37				
Lifecycle Revenue Impact (\$/KWh)	\$0.00004297				

Table 17. ID Three-Year Business Plan: Business-as-Usual Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.049	\$2,016,120	\$3,409,603	\$1,393,483	1.69
Total Resource Cost Test (TRC) No Adder	\$0.049	\$2,016,120	\$3,099,639	\$1,083,519	1.54
Utility Cost Test (UCT)	\$0.025	\$1,042,614	\$3,099,639	\$2,057,025	2.97
Rate Impact Test (RIM)		\$4,241,649	\$3,099,639	(\$1,142,010)	0.73
Participant Cost Test (PCT)		\$2,176,522	\$4,810,333	\$2,633,811	2.21
Discounted Participant Payback (years)	4.30				
Lifecycle Revenue Impact (\$/KWh)	\$0.00003599				

Table 18. ID Three-Year Business Plan: Business-as-Usual Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.049	\$1,886,305	\$3,346,069	\$1,459,765	1.77
Total Resource Cost Test (TRC) No Adder	\$0.049	\$1,886,305	\$3,041,881	\$1,155,576	1.61
Utility Cost Test (UCT)	\$0.025	\$975,482	\$3,041,881	\$2,066,400	3.12
Rate Impact Test (RIM)		\$4,025,402	\$3,041,881	(\$983,521)	0.76
Participant Cost Test (PCT)		\$2,036,379	\$4,573,047	\$2,536,668	2.25
Discounted Participant Payback (years)	5.23				
Lifecycle Revenue Impact (\$/KWh)	\$0.00002954				

Table 19. ID Three-Year Business Plan: Business-as-Usual Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.049	\$6,057,295	\$10,250,985	\$4,193,690	1.69
Total Resource Cost Test (TRC) No Adder	\$0.049	\$6,057,295	\$9,319,077	\$3,261,782	1.54
Utility Cost Test (UCT)	\$0.025	\$3,132,463	\$9,319,077	\$6,186,614	2.97
Rate Impact Test (RIM)		\$12,736,857	\$9,319,077	(\$3,417,780)	0.73
Participant Cost Test (PCT)		\$6,539,212	\$14,443,544	\$7,904,332	2.21
Discounted Participant Payback (years)	4.28				
Lifecycle Revenue Impact (\$/KWh)	\$0.00010265				

Table 20. ID Increase EF Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.031	\$20,353	\$54,806	\$34,453	2.69
Total Resource Cost Test (TRC) No Adder	\$0.031	\$20,353	\$49,824	\$29,471	2.45
Utility Cost Test (UCT)	\$0.109	\$71,183	\$49,824	(\$21,359)	0.70
Rate Impact Test (RIM)		\$118,102	\$49,824	(\$68,278)	0.42
Participant Cost Test (PCT)		\$17,803	\$119,393	\$101,589	6.71
Discounted Participant Payback (years)	0.25				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000196				

Table 21. ID Increase EF Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.031	\$19,043	\$52,976	\$33,933	2.78
Total Resource Cost Test (TRC) No Adder	\$0.031	\$19,043	\$48,160	\$29,117	2.53
Utility Cost Test (UCT)	\$0.109	\$66,600	\$48,160	(\$18,440)	0.72
Rate Impact Test (RIM)		\$111,331	\$48,160	(\$63,172)	0.43
Participant Cost Test (PCT)		\$16,657	\$112,642	\$95,985	6.76
Discounted Participant Payback (years)	1.25				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000175				

Table 22. ID Increase EF Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.031	\$17,816	\$51,432	\$33,616	2.89
Total Resource Cost Test (TRC) No Adder	\$0.031	\$17,816	\$46,757	\$28,940	2.62
Utility Cost Test (UCT)	\$0.109	\$62,312	\$46,757	(\$15,555)	0.75
Rate Impact Test (RIM)		\$104,958	\$46,757	(\$58,202)	0.45
Participant Cost Test (PCT)		\$15,584	\$106,283	\$90,698	6.82
Discounted Participant Payback (years)	2.25				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000155				

Table 23. ID Increase EF Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.031	\$57,212	\$159,214	\$102,002	2.78
Total Resource Cost Test (TRC) No Adder	\$0.031	\$57,212	\$144,740	\$87,528	2.53
Utility Cost Test (UCT)	\$0.109	\$200,095	\$144,740	(\$55,354)	0.72
Rate Impact Test (RIM)		\$334,392	\$144,740	(\$189,651)	0.43
Participant Cost Test (PCT)		\$50,044	\$338,317	\$288,273	6.76
Discounted Participant Payback (years)	0.25				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000506				

Table 24. ID Increase Agriculture System Re-design Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.061	\$49,021	\$65,248	\$16,227	1.33
Total Resource Cost Test (TRC) No Adder	\$0.061	\$49,021	\$59,317	\$10,295	1.21
Utility Cost Test (UCT)	\$0.096	\$76,704	\$59,317	(\$17,388)	0.77
Rate Impact Test (RIM)		\$145,899	\$59,317	(\$86,583)	0.41
Participant Cost Test (PCT)		\$44,116	\$143,114	\$98,998	3.24
Discounted Participant Payback (years)	0.55				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000430				

Table 25. ID Increase Agriculture System Re-design Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.061	\$45,865	\$64,769	\$18,904	1.41
Total Resource Cost Test (TRC) No Adder	\$0.061	\$45,865	\$58,881	\$13,016	1.28
Utility Cost Test (UCT)	\$0.096	\$71,765	\$58,881	(\$12,885)	0.82
Rate Impact Test (RIM)		\$137,735	\$58,881	(\$78,854)	0.43
Participant Cost Test (PCT)		\$41,275	\$135,222	\$93,946	3.28
Discounted Participant Payback (years)	1.54				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000353				

Table 26. ID Increase Agriculture System Re-design Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.061	\$42,912	\$63,998	\$21,086	1.49
Total Resource Cost Test (TRC) No Adder	\$0.061	\$42,912	\$58,180	\$15,268	1.36
Utility Cost Test (UCT)	\$0.096	\$67,144	\$58,180	(\$8,965)	0.87
Rate Impact Test (RIM)		\$130,039	\$58,180	(\$71,859)	0.45
Participant Cost Test (PCT)		\$38,618	\$127,776	\$89,158	3.31
Discounted Participant Payback (years)	2.54				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000294				

Table 27. ID Increase Agriculture System Re-design Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.061	\$137,798	\$194,015	\$56,216	1.41
Total Resource Cost Test (TRC) No Adder	\$0.061	\$137,798	\$176,377	\$38,579	1.28
Utility Cost Test (UCT)	\$0.096	\$215,614	\$176,377	(\$39,237)	0.82
Rate Impact Test (RIM)		\$413,673	\$176,377	(\$237,296)	0.43
Participant Cost Test (PCT)		\$124,009	\$406,111	\$282,102	3.27
Discounted Participant Payback (years)	0.55				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000970				

Table 28. ID Energy Management Offer Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.073	\$27,694	\$25,794	(\$1,900)	0.93
Total Resource Cost Test (TRC) No Adder	\$0.073	\$27,694	\$23,449	(\$4,245)	0.85
Utility Cost Test (UCT)	\$0.057	\$21,516	\$23,449	\$1,933	1.09
Rate Impact Test (RIM)		\$46,184	\$23,449	(\$22,734)	0.51
Participant Cost Test (PCT)		\$9,925	\$30,148	\$20,223	3.04
Discounted Participant Payback (years)	0.80				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000149				

Table 29. ID Energy Management Offer Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.078	\$59,690	\$53,644	(\$6,046)	0.90
Total Resource Cost Test (TRC) No Adder	\$0.078	\$59,690	\$48,767	(\$10,923)	0.82
Utility Cost Test (UCT)	\$0.062	\$47,769	\$48,767	\$999	1.02
Rate Impact Test (RIM)		\$98,809	\$48,767	(\$50,041)	0.49
Participant Cost Test (PCT)		\$19,579	\$62,379	\$42,800	3.19
Discounted Participant Payback (years)	1.77				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000399				

Table 30. ID Energy Management Offer Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.081	\$111,114	\$98,209	(\$12,905)	0.88
Total Resource Cost Test (TRC) No Adder	\$0.081	\$111,114	\$89,281	(\$21,833)	0.80
Utility Cost Test (UCT)	\$0.066	\$90,353	\$89,281	(\$1,072)	0.99
Rate Impact Test (RIM)		\$182,712	\$89,281	(\$93,432)	0.49
Participant Cost Test (PCT)		\$34,528	\$112,878	\$78,350	3.27
Discounted Participant Payback (years)	2.75				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000614				

Table 31. ID Energy Management Offer Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.079	\$198,498	\$177,647	(\$20,851)	0.89
Total Resource Cost Test (TRC) No Adder	\$0.079	\$198,498	\$161,497	(\$37,001)	0.81
Utility Cost Test (UCT)	\$0.063	\$159,638	\$161,497	\$1,860	1.01
Rate Impact Test (RIM)		\$327,705	\$161,497	(\$166,207)	0.49
Participant Cost Test (PCT)		\$64,032	\$205,405	\$141,373	3.21
Discounted Participant Payback (years)	0.80				
Lifecycle Revenue Impact (\$/KWh)	\$0.00001093				

Table 32. ID Pay for Commissioning Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.033	\$46,558	\$116,333	\$69,774	2.50
Total Resource Cost Test (TRC) No Adder	\$0.033	\$46,558	\$105,757	\$59,199	2.27
Utility Cost Test (UCT)	\$0.019	\$26,487	\$105,757	\$79,270	3.99
Rate Impact Test (RIM)		\$126,077	\$105,757	(\$20,320)	0.84
Participant Cost Test (PCT)		\$43,091	\$130,179	\$87,088	3.02
Discounted Participant Payback (years)	2.53				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000058				

Table 33. ID Pay for Commissioning Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.033	\$43,561	\$112,448	\$68,887	2.58
Total Resource Cost Test (TRC) No Adder	\$0.033	\$43,561	\$102,225	\$58,665	2.35
Utility Cost Test (UCT)	\$0.019	\$24,781	\$102,225	\$77,444	4.13
Rate Impact Test (RIM)		\$119,730	\$102,225	(\$17,504)	0.85
Participant Cost Test (PCT)		\$40,316	\$123,786	\$83,470	3.07
Discounted Participant Payback (years)	3.48				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000048				

Table 34. ID Pay for Commissioning Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.033	\$40,756	\$109,171	\$68,415	2.68
Total Resource Cost Test (TRC) No Adder	\$0.033	\$40,756	\$99,246	\$58,491	2.44
Utility Cost Test (UCT)	\$0.019	\$23,186	\$99,246	\$76,061	4.28
Rate Impact Test (RIM)		\$113,708	\$99,246	(\$14,462)	0.87
Participant Cost Test (PCT)		\$37,720	\$117,712	\$79,992	3.12
Discounted Participant Payback (years)	4.43				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000039				

Table 35. ID Pay for Commissioning Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.033	\$130,875	\$337,952	\$207,077	2.58
Total Resource Cost Test (TRC) No Adder	\$0.033	\$130,875	\$307,229	\$176,354	2.35
Utility Cost Test (UCT)	\$0.019	\$74,454	\$307,229	\$232,775	4.13
Rate Impact Test (RIM)		\$359,516	\$307,229	(\$52,287)	0.85
Participant Cost Test (PCT)		\$121,127	\$371,676	\$250,549	3.07
Discounted Participant Payback (years)	3.46				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000140				

Table 36. ID Commercial Food Service Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.001	\$216	\$25,746	\$25,530	119.34
Total Resource Cost Test (TRC) No Adder	\$0.001	\$216	\$23,406	\$23,190	108.49
Utility Cost Test (UCT)	\$0.003	\$949	\$23,406	\$22,457	24.66
Rate Impact Test (RIM)		\$29,635	\$23,406	(\$6,229)	0.79
Participant Cost Test (PCT)		(\$4,178)	\$40,749	\$44,927	0.00
Discounted Participant Payback (years)	N/A				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000021				

Table 37. ID Commercial Food Service Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.001	\$378	\$25,600	\$25,222	67.81
Total Resource Cost Test (TRC) No Adder	\$0.001	\$378	\$23,272	\$22,895	61.65
Utility Cost Test (UCT)	\$0.003	\$976	\$23,272	\$22,296	23.85
Rate Impact Test (RIM)		\$28,660	\$23,272	(\$5,388)	0.81
Participant Cost Test (PCT)		(\$3,698)	\$39,440	\$43,138	0.00
Discounted Participant Payback (years)	N/A				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000017				

Table 38. ID Commercial Food Service Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.020	\$6,905	\$29,899	\$22,994	4.33
Total Resource Cost Test (TRC) No Adder	\$0.020	\$6,905	\$27,181	\$20,275	3.94
Utility Cost Test (UCT)	\$0.008	\$2,811	\$27,181	\$24,370	9.67
Rate Impact Test (RIM)		\$34,656	\$27,181	(\$7,475)	0.78
Participant Cost Test (PCT)		\$5,496	\$47,117	\$41,622	8.57
Discounted Participant Payback (years)	3.17				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000022				

Table 39. ID Commercial Food Service Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.008	\$7,498	\$81,244	\$73,746	10.83
Total Resource Cost Test (TRC) No Adder	\$0.008	\$7,498	\$73,859	\$66,360	9.85
Utility Cost Test (UCT)	\$0.005	\$4,736	\$73,859	\$69,123	15.60
Rate Impact Test (RIM)		\$92,950	\$73,859	(\$19,092)	0.79
Participant Cost Test (PCT)		(\$2,381)	\$127,306	\$129,687	0.00
Discounted Participant Payback (years)	N/A				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000057				

Table 40. ID Commercial HVAC Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.066	\$15,080	\$18,345	\$3,264	1.22
Total Resource Cost Test (TRC) No Adder	\$0.066	\$15,080	\$16,677	\$1,597	1.11
Utility Cost Test (UCT)	\$0.030	\$6,843	\$16,677	\$9,834	2.44
Rate Impact Test (RIM)		\$27,282	\$16,677	(\$10,605)	0.61
Participant Cost Test (PCT)		\$19,302	\$35,201	\$15,899	1.82
Discounted Participant Payback (years)	4.91				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000035				

Table 41. ID Commercial HVAC Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.066	\$14,807	\$18,901	\$4,094	1.28
Total Resource Cost Test (TRC) No Adder	\$0.066	\$14,807	\$17,183	\$2,376	1.16
Utility Cost Test (UCT)	\$0.030	\$6,842	\$17,183	\$10,340	2.51
Rate Impact Test (RIM)		\$27,282	\$17,183	(\$10,100)	0.63
Participant Cost Test (PCT)		\$18,954	\$35,242	\$16,288	1.86
Discounted Participant Payback (years)	5.76				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000032				

Table 42. ID Commercial HVAC Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.066	\$14,631	\$19,304	\$4,673	1.32
Total Resource Cost Test (TRC) No Adder	\$0.066	\$14,631	\$17,549	\$2,918	1.20
Utility Cost Test (UCT)	\$0.031	\$6,898	\$17,549	\$10,651	2.54
Rate Impact Test (RIM)		\$27,459	\$17,549	(\$9,910)	0.64
Participant Cost Test (PCT)		\$18,731	\$35,504	\$16,773	1.90
Discounted Participant Payback (years)	6.62				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000030				

Table 43. ID Commercial HVAC Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.066	\$44,518	\$56,550	\$12,031	1.27
Total Resource Cost Test (TRC) No Adder	\$0.066	\$44,518	\$51,409	\$6,890	1.15
Utility Cost Test (UCT)	\$0.030	\$20,584	\$51,409	\$30,825	2.50
Rate Impact Test (RIM)		\$82,023	\$51,409	(\$30,615)	0.63
Participant Cost Test (PCT)		\$56,987	\$105,947	\$48,961	1.86
Discounted Participant Payback (years)	5.78				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000092				

Table 44. ID Industrial Compressed Air Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.053	\$8,226	\$13,016	\$4,790	1.58
Total Resource Cost Test (TRC) No Adder	\$0.053	\$8,226	\$11,833	\$3,607	1.44
Utility Cost Test (UCT)	\$0.031	\$4,800	\$11,833	\$7,033	2.47
Rate Impact Test (RIM)		\$14,840	\$11,833	(\$3,008)	0.80
Participant Cost Test (PCT)		\$7,220	\$14,281	\$7,061	1.98
Discounted Participant Payback (years)	4.45				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000009				

Table 45. ID Industrial Compressed Air Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.053	\$7,696	\$12,581	\$4,885	1.63
Total Resource Cost Test (TRC) No Adder	\$0.053	\$7,696	\$11,438	\$3,741	1.49
Utility Cost Test (UCT)	\$0.031	\$4,491	\$11,438	\$6,947	2.55
Rate Impact Test (RIM)		\$14,063	\$11,438	(\$2,626)	0.81
Participant Cost Test (PCT)		\$6,755	\$13,562	\$6,807	2.01
Discounted Participant Payback (years)	5.36				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000007				

Table 46. ID Industrial Compressed Air Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.053	\$7,201	\$12,215	\$5,014	1.70
Total Resource Cost Test (TRC) No Adder	\$0.053	\$7,201	\$11,104	\$3,904	1.54
Utility Cost Test (UCT)	\$0.031	\$4,202	\$11,104	\$6,902	2.64
Rate Impact Test (RIM)		\$13,328	\$11,104	(\$2,224)	0.83
Participant Cost Test (PCT)		\$6,320	\$12,880	\$6,560	2.04
Discounted Participant Payback (years)	6.27				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000006				

Table 47. ID Industrial Compressed Air Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.053	\$23,123	\$37,812	\$14,689	1.64
Total Resource Cost Test (TRC) No Adder	\$0.053	\$23,123	\$34,375	\$11,252	1.49
Utility Cost Test (UCT)	\$0.031	\$13,493	\$34,375	\$20,882	2.55
Rate Impact Test (RIM)		\$42,232	\$34,375	(\$7,857)	0.81
Participant Cost Test (PCT)		\$20,295	\$40,724	\$20,429	2.01
Discounted Participant Payback (years)	5.35				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000021				

Table 48. ID Industrial Potato Storage Fan VFD Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.048	\$11,601	\$20,175	\$8,574	1.74
Total Resource Cost Test (TRC) No Adder	\$0.048	\$11,601	\$18,341	\$6,740	1.58
Utility Cost Test (UCT)	\$0.031	\$7,440	\$18,341	\$10,901	2.47
Rate Impact Test (RIM)		\$23,003	\$18,341	(\$4,662)	0.80
Participant Cost Test (PCT)		\$9,900	\$22,136	\$12,236	2.24
Discounted Participant Payback (years)	3.50				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000013				

Table 49. ID Industrial Potato Storage Fan VFD Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.048	\$10,854	\$19,501	\$8,647	1.80
Total Resource Cost Test (TRC) No Adder	\$0.048	\$10,854	\$17,728	\$6,874	1.63
Utility Cost Test (UCT)	\$0.031	\$6,961	\$17,728	\$10,767	2.55
Rate Impact Test (RIM)		\$21,798	\$17,728	(\$4,070)	0.81
Participant Cost Test (PCT)		\$9,263	\$21,022	\$11,759	2.27
Discounted Participant Payback (years)	4.43				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000011				

Table 50. ID Industrial Potato Storage Fan VFD Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.048	\$10,155	\$18,933	\$8,778	1.86
Total Resource Cost Test (TRC) No Adder	\$0.048	\$10,155	\$17,212	\$7,056	1.69
Utility Cost Test (UCT)	\$0.031	\$6,513	\$17,212	\$10,699	2.64
Rate Impact Test (RIM)		\$20,658	\$17,212	(\$3,447)	0.83
Participant Cost Test (PCT)		\$8,666	\$19,964	\$11,298	2.30
Discounted Participant Payback (years)	5.36				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000009				

Table 51. ID Industrial Potato Storage Fan VFD Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.048	\$32,610	\$58,609	\$25,998	1.80
Total Resource Cost Test (TRC) No Adder	\$0.048	\$32,610	\$53,281	\$20,670	1.63
Utility Cost Test (UCT)	\$0.031	\$20,914	\$53,281	\$32,367	2.55
Rate Impact Test (RIM)		\$65,459	\$53,281	(\$12,179)	0.81
Participant Cost Test (PCT)		\$27,829	\$63,122	\$35,293	2.27
Discounted Participant Payback (years)	4.41				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000033				

Table 52. ID Industrial Adaptive Refrigeration Control Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.050	\$10,886	\$18,222	\$7,336	1.67
Total Resource Cost Test (TRC) No Adder	\$0.050	\$10,886	\$16,566	\$5,680	1.52
Utility Cost Test (UCT)	\$0.029	\$6,420	\$16,566	\$10,146	2.58
Rate Impact Test (RIM)		\$20,477	\$16,566	(\$3,911)	0.81
Participant Cost Test (PCT)		\$9,400	\$19,694	\$10,294	2.10
Discounted Participant Payback (years)	4.11				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000011				

Table 53. ID Industrial Adaptive Refrigeration Control Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.057	\$16,525	\$25,163	\$8,638	1.52
Total Resource Cost Test (TRC) No Adder	\$0.057	\$16,525	\$22,875	\$6,350	1.38
Utility Cost Test (UCT)	\$0.030	\$8,701	\$22,875	\$14,174	2.63
Rate Impact Test (RIM)		\$27,846	\$22,875	(\$4,971)	0.82
Participant Cost Test (PCT)		\$14,783	\$26,844	\$12,061	1.82
Discounted Participant Payback (years)	6.33				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000014				

Table 54. ID Industrial Adaptive Refrigeration Control Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.059	\$18,427	\$28,094	\$9,667	1.52
Total Resource Cost Test (TRC) No Adder	\$0.059	\$18,427	\$25,540	\$7,113	1.39
Utility Cost Test (UCT)	\$0.030	\$9,401	\$25,540	\$16,138	2.72
Rate Impact Test (RIM)		\$30,392	\$25,540	(\$4,852)	0.84
Participant Cost Test (PCT)		\$16,632	\$29,362	\$12,730	1.77
Discounted Participant Payback (years)	7.63				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000013				

Table 55. ID Industrial Adaptive Refrigeration Control Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.056	\$45,837	\$71,479	\$25,642	1.56
Total Resource Cost Test (TRC) No Adder	\$0.056	\$45,837	\$64,981	\$19,144	1.42
Utility Cost Test (UCT)	\$0.030	\$24,523	\$64,981	\$40,458	2.65
Rate Impact Test (RIM)		\$78,714	\$64,981	(\$13,733)	0.83
Participant Cost Test (PCT)		\$40,815	\$75,900	\$35,085	1.86
Discounted Participant Payback (years)	6.26				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000037				

Table 56. ID Industrial Fast Acting Door Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.076	\$18,900	\$20,826	\$1,926	1.10
Total Resource Cost Test (TRC) No Adder	\$0.076	\$18,900	\$18,932	\$32	1.00
Utility Cost Test (UCT)	\$0.031	\$7,680	\$18,932	\$11,252	2.47
Rate Impact Test (RIM)		\$23,745	\$18,932	(\$4,812)	0.80
Participant Cost Test (PCT)		\$18,000	\$22,850	\$4,850	1.27
Discounted Participant Payback (years)	9.81				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000014				

Table 57. ID Industrial Fast Acting Door Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.076	\$17,683	\$20,130	\$2,447	1.14
Total Resource Cost Test (TRC) No Adder	\$0.076	\$17,683	\$18,300	\$617	1.03
Utility Cost Test (UCT)	\$0.031	\$7,185	\$18,300	\$11,115	2.55
Rate Impact Test (RIM)		\$22,501	\$18,300	(\$4,201)	0.81
Participant Cost Test (PCT)		\$16,841	\$21,700	\$4,859	1.29
Discounted Participant Payback (years)	10.58				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000012				

Table 58. ID Industrial Fast Acting Door Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.076	\$16,544	\$19,544	\$2,999	1.18
Total Resource Cost Test (TRC) No Adder	\$0.076	\$16,544	\$17,767	\$1,222	1.07
Utility Cost Test (UCT)	\$0.031	\$6,723	\$17,767	\$11,044	2.64
Rate Impact Test (RIM)		\$21,325	\$17,767	(\$3,558)	0.83
Participant Cost Test (PCT)		\$15,757	\$20,608	\$4,852	1.31
Discounted Participant Payback (years)	11.36				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000010				

Table 59. ID Industrial Fast Acting Door Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.076	\$53,128	\$60,499	\$7,372	1.14
Total Resource Cost Test (TRC) No Adder	\$0.076	\$53,128	\$54,999	\$1,872	1.04
Utility Cost Test (UCT)	\$0.031	\$21,588	\$54,999	\$33,411	2.55
Rate Impact Test (RIM)		\$67,571	\$54,999	(\$12,571)	0.81
Participant Cost Test (PCT)		\$50,598	\$65,158	\$14,561	1.29
Discounted Participant Payback (years)	10.58				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000034				

Table 60. ID Industrial End Use Compressed Air Reduction Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.052	\$3,125	\$4,657	\$1,532	1.49
Total Resource Cost Test (TRC) No Adder	\$0.052	\$3,125	\$4,234	\$1,109	1.35
Utility Cost Test (UCT)	\$0.040	\$2,400	\$4,234	\$1,834	1.76
Rate Impact Test (RIM)		\$6,127	\$4,234	(\$1,893)	0.69
Participant Cost Test (PCT)		\$2,500	\$5,687	\$3,187	2.27
Discounted Participant Payback (years)	1.99				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000007				

Table 61. ID Industrial End Use Compressed Air Reduction Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.052	\$2,924	\$4,523	\$1,599	1.55
Total Resource Cost Test (TRC) No Adder	\$0.052	\$2,924	\$4,112	\$1,188	1.41
Utility Cost Test (UCT)	\$0.040	\$2,245	\$4,112	\$1,866	1.83
Rate Impact Test (RIM)		\$5,799	\$4,112	(\$1,687)	0.71
Participant Cost Test (PCT)		\$2,339	\$5,396	\$3,057	2.31
Discounted Participant Payback (years)	2.95				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000006				

Table 62. ID Industrial End Use Compressed Air Reduction Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.052	\$2,736	\$4,408	\$1,672	1.61
Total Resource Cost Test (TRC) No Adder	\$0.052	\$2,736	\$4,007	\$1,272	1.46
Utility Cost Test (UCT)	\$0.040	\$2,101	\$4,007	\$1,906	1.91
Rate Impact Test (RIM)		\$5,488	\$4,007	(\$1,481)	0.73
Participant Cost Test (PCT)		\$2,188	\$5,119	\$2,931	2.34
Discounted Participant Payback (years)	3.92				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000005				

Table 63. ID Industrial End Use Compressed Air Reduction Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.052	\$8,784	\$13,588	\$4,803	1.55
Total Resource Cost Test (TRC) No Adder	\$0.052	\$8,784	\$12,353	\$3,568	1.41
Utility Cost Test (UCT)	\$0.040	\$6,746	\$12,353	\$5,606	1.83
Rate Impact Test (RIM)		\$17,414	\$12,353	(\$5,061)	0.71
Participant Cost Test (PCT)		\$7,027	\$16,202	\$9,175	2.31
Discounted Participant Payback (years)	2.97				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000017				

Table 64. ID Industrial Wastewater Mixing Grid Bee Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.062	\$38,350	\$52,064	\$13,714	1.36
Total Resource Cost Test (TRC) No Adder	\$0.062	\$38,350	\$47,331	\$8,981	1.23
Utility Cost Test (UCT)	\$0.031	\$19,200	\$47,331	\$28,131	2.47
Rate Impact Test (RIM)		\$59,362	\$47,331	(\$12,031)	0.80
Participant Cost Test (PCT)		\$35,000	\$57,125	\$22,125	1.63
Discounted Participant Payback (years)	6.33				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000035				

Table 65. ID Industrial Wastewater Mixing Grid Bee Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.062	\$35,881	\$50,325	\$14,445	1.40
Total Resource Cost Test (TRC) No Adder	\$0.062	\$35,881	\$45,750	\$9,870	1.28
Utility Cost Test (UCT)	\$0.031	\$17,964	\$45,750	\$27,787	2.55
Rate Impact Test (RIM)		\$56,253	\$45,750	(\$10,503)	0.81
Participant Cost Test (PCT)		\$32,746	\$54,249	\$21,503	1.66
Discounted Participant Payback (years)	7.19				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000029				

Table 66. ID Industrial Wastewater Mixing Grid Bee Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.062	\$33,570	\$48,859	\$15,288	1.46
Total Resource Cost Test (TRC) No Adder	\$0.062	\$33,570	\$44,417	\$10,847	1.32
Utility Cost Test (UCT)	\$0.031	\$16,807	\$44,417	\$27,610	2.64
Rate Impact Test (RIM)		\$53,312	\$44,417	(\$8,895)	0.83
Participant Cost Test (PCT)		\$30,638	\$51,521	\$20,883	1.68
Discounted Participant Payback (years)	8.06				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000024				

Table 67. ID Industrial Wastewater Mixing Grid Bee Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.062	\$107,801	\$151,248	\$43,447	1.40
Total Resource Cost Test (TRC) No Adder	\$0.062	\$107,801	\$137,498	\$29,697	1.28
Utility Cost Test (UCT)	\$0.031	\$53,971	\$137,498	\$83,527	2.55
Rate Impact Test (RIM)		\$168,927	\$137,498	(\$31,428)	0.81
Participant Cost Test (PCT)		\$98,384	\$162,896	\$64,511	1.66
Discounted Participant Payback (years)	7.18				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000084				

Table 68. ID Small Business Cost-Effectiveness 2015

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.079	\$91,054	\$91,774	\$720	1.01
Total Resource Cost Test (TRC) No Adder	\$0.079	\$91,054	\$83,431	(\$7,623)	0.92
Utility Cost Test (UCT)	\$0.074	\$84,387	\$83,431	(\$957)	0.99
Rate Impact Test (RIM)		\$186,640	\$83,431	(\$103,209)	0.45
Participant Cost Test (PCT)		\$66,668	\$166,948	\$100,280	2.50
Discounted Participant Payback (years)	1.10				
Lifecycle Revenue Impact (\$/KWh)	\$0.00000343				

Table 69. ID Small Business Cost-Effectiveness 2016

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.069	\$327,287	\$399,216	\$71,929	1.22
Total Resource Cost Test (TRC) No Adder	\$0.069	\$327,287	\$362,924	\$35,637	1.11
Utility Cost Test (UCT)	\$0.063	\$299,664	\$362,924	\$63,260	1.21
Rate Impact Test (RIM)		\$731,388	\$362,924	(\$368,464)	0.50
Participant Cost Test (PCT)		\$276,234	\$700,680	\$424,446	2.54
Discounted Participant Payback (years)	2.08				
Lifecycle Revenue Impact (\$/KWh)	\$0.00001161				

Table 70. ID Small Business Cost-Effectiveness 2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.067	\$491,023	\$635,765	\$144,742	1.29
Total Resource Cost Test (TRC) No Adder	\$0.067	\$491,023	\$577,969	\$86,945	1.18
Utility Cost Test (UCT)	\$0.061	\$448,504	\$577,969	\$129,464	1.29
Rate Impact Test (RIM)		\$1,125,653	\$577,969	(\$547,685)	0.51
Participant Cost Test (PCT)		\$425,187	\$1,092,537	\$667,350	2.57
Discounted Participant Payback (years)	3.06				
Lifecycle Revenue Impact (\$/KWh)	\$0.00001645				

Table 71. ID Small Business Cost-Effectiveness 2015-2017

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.069	\$909,364	\$1,126,756	\$217,391	1.24
Total Resource Cost Test (TRC) No Adder	\$0.069	\$909,364	\$1,024,323	\$114,959	1.13
Utility Cost Test (UCT)	\$0.063	\$832,556	\$1,024,323	\$191,768	1.23
Rate Impact Test (RIM)		\$2,043,680	\$1,024,323	(\$1,019,357)	0.50
Participant Cost Test (PCT)		\$768,089	\$1,960,165	\$1,192,076	2.55
Discounted Participant Payback (years)	1.98				
Lifecycle Revenue Impact (\$/KWh)	\$0.00003062				

Case No. PAC-E-14-08
Exhibit No. 3
Witness: Kathryn C. Hymas

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Testimony of Kathryn C. Hymas

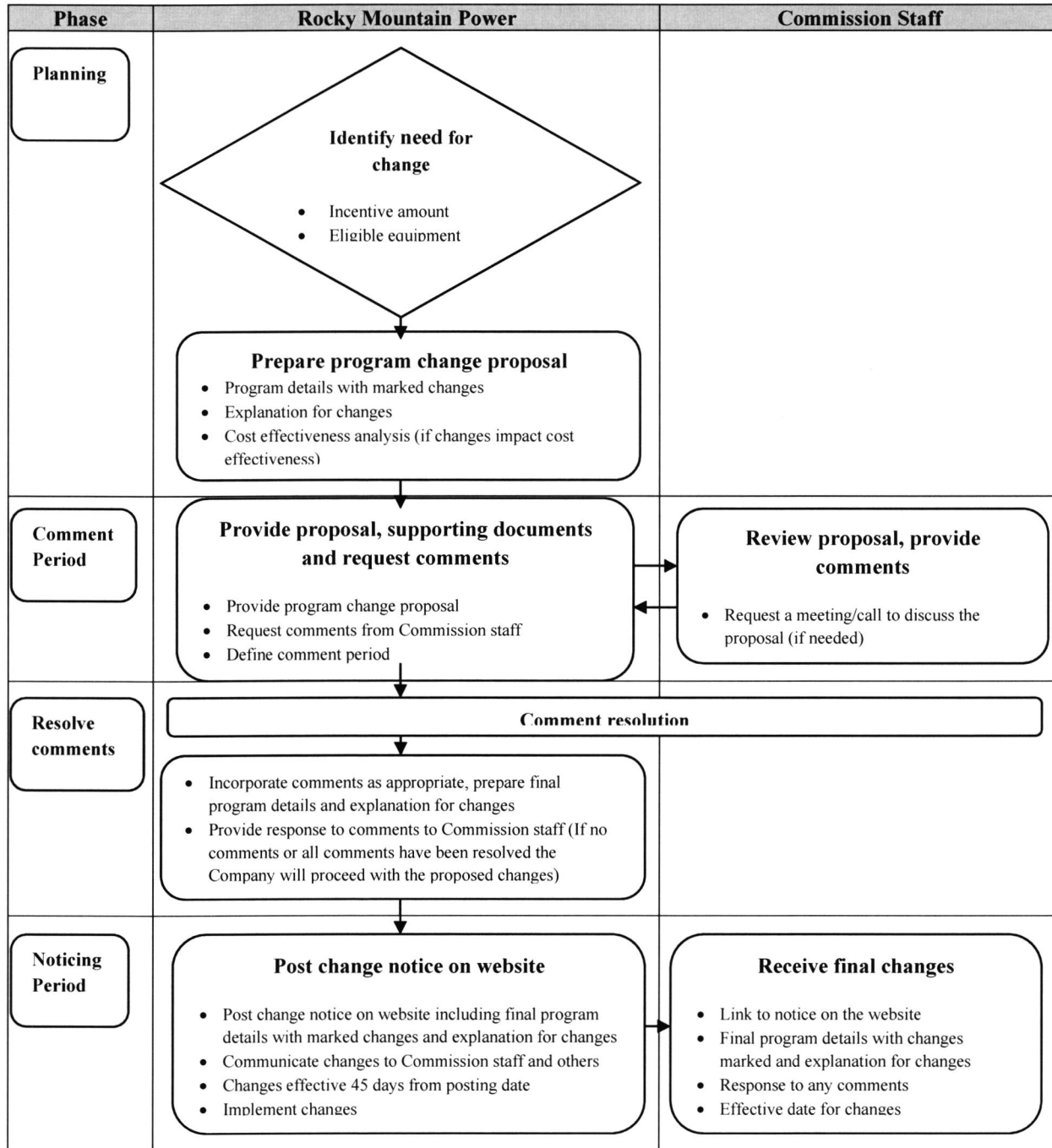
Flexible Tariff Format – Change Process - Idaho

August 2014

Exhibit 3
Rocky Mountain Power Flexible Tariff Format – Change Process - Idaho

This process applies to specific program details managed outside of the program tariff such as:

- Incentive tables
- Program definitions
- General incentive information



Case No. PAC-E-14-08
Exhibit No. 4
Witness: Kathryn C. Hymas

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Testimony of Kathryn C. Hymas

Electric Service Schedule 140 – Non-Residential Energy Efficiency

August 2014



I.P.U.C. No. 1

**Eleventh Revision of Sheet No. B.2
Canceling Tenth Revision of Sheet No. B.2**

ELECTRIC SERVICE SCHEDULES - Continued

Schedule No.	Class of Service	Sheet No.
23	General Service - Small Power	23.1 - 23.3
23A	General Service - Small Power (Residential and Farm)	23A.1 - 23A.4
24	Interruptible Power Service	24.1 - 24.5
31	Partial Requirements Service – High Voltage	31.1 – 31.6
34	Pacific Northwest Electric Power Planning and Conservation Act - Residential and Farm Kilowatt-Hour Credit	34.1 - 34.3
35	Optional Time-of-Day General Service – Distribution Voltage	35.1 - 35.3
35A	Optional Time-of-Day General Service – Distribution Voltage (Farm)	35A.1 -35A.4
36	Optional Time of Day Residential Service	36.1 - 36.3
70	Renewable Energy Rider – Optional	70.1 - 70.4
71	Energy Exchange Pilot Program	71.1 - 71.6
73	Renewable Energy Rider - Optional - Bulk Purchase Option	73.1 – 73.4
94	Energy Cost Adjustment	94.1
117	Residential Refrigerator Recycling Program	117.1 - 117.2
118	Home Energy Saver Incentive Program	118.1 - 118.2

(Continued)

Submitted Under Case No. PAC-E-14-08

ISSUED: August 22, 2014

EFFECTIVE: November 1, 2014



I.P.U.C. No. 1

Fifth Revision of Sheet No. B.3
Canceling Fourth Revision of Sheet No. B.3

ELECTRIC SERVICE SCHEDULES - Continued		
Schedule No.	Class of Service	Sheet No.
135	Net Metering Service	135.1 – 135.3
140	Non-Residential Energy Efficiency	140.1 – 140.3
191	Customer Efficiency Services Rate Adjustment	191
300	Regulation Charges	300.1 – 300.4
400	Special Contract	400.1
401	Special Contract	401.1

Schedule numbers not listed are not currently used.

* These schedules are not available to new customers or premises.

Submitted Under Case No. PAC-E-14-08

ISSUED: August 22, 2014

EFFECTIVE: November 1, 2014

ROCKY MOUNTAIN POWER
ELECTRIC SERVICE SCHEDULE NO. 140

STATE OF IDAHO

Non-Residential Energy Efficiency

PURPOSE: Service under this Schedule is intended to maximize the efficient utilization of the electricity requirements of new and existing loads in Non-residential Facilities through the installation of Energy Efficiency Measures and energy management protocols. Service under this Schedule is subject to funding availability.

APPLICABLE: To service under the Company's General Service Schedules 6, 6A, 7, 7A, 9, 10, 12, 19, 23, 23A, 24, 35 and 35A in all territory served by the Company in the State of Idaho. This Schedule is applicable to new and existing Non-residential Facilities and dairy barns served under the Company's residential rate schedules.

CUSTOMER PARTICIPATION: Customer participation is voluntary and is initiated by following the participation procedures on the Idaho energy efficiency program section of the Company website, and available to customers without online access upon request. The Company shall have the right to qualify participants, at its discretion, based on criteria the Company considers necessary to ensure the effective operation of the measures and utility system. Criteria may include, but will not be limited to cost effectiveness.

DESCRIPTION: Ongoing program to provide incentives for a variety of equipment and operational improvements intended for and located in Non-residential Facilities. Periodic program changes will be made to encourage customer participation in the program and to insure or enhance program cost-effectiveness as defined by the Company.

QUALIFYING MEASURE: Measures which when installed in an eligible facility result in verifiable electric energy efficiency improvement compared to existing equipment or baseline equipment as defined by the Company. The baseline will be determined with reference to existing equipment, applicable state or federal energy codes, industry standard practice and other relevant factors.

QUALIFYING ENERGY MANAGEMENT:
Operational improvements which when implemented in an eligible facility result in verifiable electric energy savings compared to standard operations as determined by the Company.

(Continued)

ELECTRICAL SERVICE SCHEDULE NO. 140 (Continued)**PROVISIONS OF SERVICE:**

- (1) Qualifying equipment or services, incentive amounts and other terms and conditions will be listed on the Idaho energy efficiency program section of the Company website, and are available to customers without online access upon request. Program changes may be made by the Company with at least 45 days advanced notice. Such changes will be prominently displayed on the Idaho energy efficiency program section of the Company website and include a minimum 45 days for processing prior offers.
- (2) Company may elect to offer energy efficiency measure ("EEM") incentives through different channels and at different points in the sales process other than individual Energy Efficiency Incentive Offer Letter(s) prior to EEM purchase. The differences will depend on EEM and will be consistent for all EEMs of similar type.
- (3) Incentives may be offered year-round or for selected time periods.
- (4) Equipment or services receiving an incentive under this program are not eligible for incentives under other Company programs.
- (5) Company will employ a variety of quality assurance techniques during the delivery of the program. They will differ by measure and may include pre- and post- installation inspections, phone surveys, and confirmation of Owner/Customer and equipment eligibility.
- (6) Company may verify or evaluate the energy savings of installed measures. This verification may include a telephone survey, site visit, review of facility operation characteristics, and pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.
- (7) Energy Project Manager co-funding is available according to the terms posted on the Idaho energy efficiency program section of the Company website.
- (8) Incentives will not be made available for fuel switching by Owner/Customer.

MINIMUM EQUIPMENT EFFICIENCY:

Retrofit energy efficiency projects must meet minimum equipment efficiency levels and equipment eligibility requirements of qualifying equipment that are listed on the Idaho energy efficiency program section of the Company website.

(Continued)

Submitted Under Case No. PAC-E-14-08

ISSUED: August 22, 2014

EFFECTIVE: November 1, 2014



I.P.U.C. No. 1

Original Sheet No. 140.3

ELECTRICAL SERVICE SCHEDULE NO. 140 (Continued)

ELECTRIC SERVICE REGULATIONS: Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Electric Service Regulations of the Company on file with and approved by the Idaho Public Utilities Commission, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

Submitted Under Case No. PAC-E-14-08

ISSUED: August 22, 2014

EFFECTIVE: November 1, 2014

I.P.U.C. No. 1

~~Tenth-Eleventh~~ Revision of Sheet No. B.2
Canceling ~~Ninth-Tenth~~ Revision of Sheet No. B.2

ELECTRIC SERVICE SCHEDULES - Continued

Schedule No.	Class of Service	Sheet No.
23	General Service - Small Power	23.1 - 23.3
23A	General Service - Small Power (Residential and Farm)	23A.1 - 23A.4
24	Interruptible Power Service	24.1 - 24.5
31	Partial Requirements Service – High Voltage	31.1 – 31.6
34	Pacific Northwest Electric Power Planning and Conservation Act - Residential and Farm Kilowatt-Hour Credit	34.1 - 34.3
35	Optional Time-of-Day General Service – Distribution Voltage	35.1 - 35.3
35A	Optional Time-of-Day General Service – Distribution Voltage (Farm)	35A.1 -35A.4
36	Optional Time of Day Residential Service	36.1 - 36.3
70	Renewable Energy Rider – Optional	70.1 - 70.4
71	Energy Exchange Pilot Program	71.1 - 71.6
73	Renewable Energy Rider - Optional - Bulk Purchase Option	73.1 – 73.4
94	Energy Cost Adjustment	94.1
115	FinAnswer Express	115.1 115.2
117	Residential Refrigerator Recycling Program	117.1 - 117.2
118	Home Energy Saver Incentive Program	118.1 - 118.2
125	Energy FinAnswer	125.1 125.9

(Continued)

Submitted Under ~~Advice No. 13-0114-xx~~ Case No. PAC-E-14-08

ISSUED: ~~August 20, 2013~~ ~~June xx~~ August 22, 2014 EFFECTIVE: ~~October 1, 2013~~ November 1 ~~July xx, 2014~~



I.P.U.C. No. 1

~~Fourth-Fifth~~ Revision of Sheet No. B.3
Canceling ~~Third-Fourth~~ Revision of Sheet No. B.3

ELECTRIC SERVICE SCHEDULES - Continued

Schedule No.	Class of Service	Sheet No.
135	Net Metering Service	135.1 – 135.3
140	Non-Residential Energy Efficiency	140.1 – 140.3
155	Agricultural Energy Services – Optional for Qualifying Customers	155.1 – 155.6
191	Customer Efficiency Services Rate Adjustment	191
300	Regulation Charges	300.1 – 300.4
400	Special Contract	400.1
401	Special Contract	401.1

Schedule numbers not listed are not currently used.

* These schedules are not available to new customers or premises.

Submitted Under ~~Case No. PAC-E-13-10~~ Case No. PAC-E-14-08

ISSUED: ~~May 24, 2013~~ August 22, 2014

EFFECTIVE: ~~August 15, 2013~~ November 1, 2014

I.P.U.C. No. 1

Original Sheet No. 140.1

ROCKY MOUNTAIN POWER

ELECTRIC SERVICE SCHEDULE NO. 140

STATE OF IDAHO

Non-Residential Energy Efficiency

PURPOSE: Service under this Schedule is intended to maximize the efficient utilization of the electricity requirements of new and existing loads in Non-residential Facilities through the installation of Energy Efficiency Measures and energy management protocols. Service under this Schedule is subject to funding availability.

APPLICABLE: To service under the Company's General Service Schedules 6, 6A, 7, 7A, 9, 10, 12, 19, 23, 23A, 24, 35 and 35A in all territory served by the Company in the State of Idaho. This Schedule is applicable to new and existing Non-residential Facilities and dairy barns served under the Company's residential rate schedules.

CUSTOMER PARTICIPATION: Customer participation is voluntary and is initiated by following the participation procedures on the Idaho energy efficiency program section of the Company website, and available to customers without online access upon request. The Company shall have the right to qualify participants, at its discretion, based on criteria the Company considers necessary to ensure the effective operation of the measures and utility system. Criteria may include, but will not be limited to cost effectiveness.

DESCRIPTION: Ongoing program to provide incentives for a variety of equipment and operational improvements intended for and located in Non-residential Facilities. Periodic program changes will be made to encourage customer participation in the program and to insure or enhance program cost-effectiveness as defined by the Company.

QUALIFYING MEASURE: Measures which when installed in an eligible facility result in verifiable electric energy efficiency improvement compared to existing equipment or baseline equipment as defined by the Company. The baseline will be determined with reference to existing equipment, applicable state or federal energy codes, industry standard practice and other relevant factors.

QUALIFYING ENERGY MANAGEMENT:
Operational improvements which when implemented in an eligible facility result in verifiable electric energy savings compared to standard operations as determined by the Company.

(Continued)

Submitted Under Case No. PAC-E-14-08

ISSUED: August 22, 2014

EFFECTIVE: November 1, 2014

ELECTRICAL SERVICE SCHEDULE NO. 140 (Continued)

PROVISIONS OF SERVICE:

- (1) Qualifying equipment or services, incentive amounts and other terms and conditions will be listed on the Idaho energy efficiency program section of the Company website, and are available to customers without online access upon request. Program changes may be made by the Company with at least 45 days advanced notice. Such changes will be prominently displayed on the Idaho energy efficiency program section of the Company website and include a minimum 45 days for processing prior offers.
- (2) Company may elect to offer energy efficiency measure ("EEM") incentives through different channels and at different points in the sales process other than individual Energy Efficiency Incentive Offer Letter(s) prior to EEM purchase. The differences will depend on EEM and will be consistent for all EEMs of similar type.
- (3) Incentives may be offered year-round or for selected time periods.
- (4) Equipment or services receiving an incentive under this program are not eligible for incentives under other Company programs.
- (5) Company will employ a variety of quality assurance techniques during the delivery of the program. They will differ by measure and may include pre- and post- installation inspections, phone surveys, and confirmation of Owner/Customer and equipment eligibility.
- (6) Company may verify or evaluate the energy savings of installed measures. This verification may include a telephone survey, site visit, review of facility operation characteristics, and pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.
- (7) Energy Project Manager co-funding is available according to the terms posted on the Idaho energy efficiency program section of the Company website.
- (8) Incentives will not be made available for fuel switching by Owner/Customer.

MINIMUM EQUIPMENT EFFICIENCY:

Retrofit energy efficiency projects must meet minimum equipment efficiency levels and equipment eligibility requirements of qualifying equipment that are listed on the Idaho energy efficiency program section of the Company website.

(Continued)



I.P.U.C. No. 1

Original Sheet No. 140.3

ELECTRICAL SERVICE SCHEDULE NO. 140 (Continued)

ELECTRIC SERVICE REGULATIONS: Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Electric Service Regulations of the Company on file with and approved by the Idaho Public Utilities Commission, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

Submitted Under Case No. PAC-E-14-08

ISSUED: August 22, 2014

EFFECTIVE: November 1, 2014

I.P.U.C. No. 1

**Third Revision of Sheet No. 115.1
Canceling Second Revision of Sheet No. 115.1**

ROCKY MOUNTAIN POWER

ELECTRIC SERVICE SCHEDULE NO. 115

STATE OF IDAHO

FinAnswer Express

PURPOSE: Service under this Schedule is intended to maximize the efficient utilization of the electricity requirements of new and existing loads in Commercial Buildings and Industrial Facilities through the installation of Energy Efficiency Measures. Service under this Schedule is subject to funding availability.

APPLICABLE: To service under the Company's General Service Schedules 6, 6A, 7, 7A, 9, 12, 19, 23, 23A, 24, 35 and 35A in all territory served by the Company in the State of Idaho. This Schedule is applicable to new and existing Commercial Buildings and Industrial Facilities and dairy barns served under the Company's residential rate schedules.

CUSTOMER PARTICIPATION: Customer participation is voluntary and is initiated by following the participation procedures on the Idaho energy efficiency program section of the Company website, and available to customers without online access upon request.

DESCRIPTION: Ongoing program to provide incentives for a variety of equipment and services intended for and located in commercial buildings and industrial facilities. Periodic program changes will be made to insure or enhance program cost-effectiveness as defined by the Company.

QUALIFYING EQUIPMENT OR SERVICES: Equipment or services which when installed or performed in an eligible facility result in verifiable electric energy efficiency improvement compared to existing equipment or baseline equipment as defined by the Company.

(Continued)

I.P.U.C. No. 1

**Second Revision of Sheet No. 115.2
Canceling First Revision of Sheet No. 115.2**

ELECTRICAL SERVICE SCHEDULE NO. 115 (Continued)

PROVISIONS OF SERVICE:

- (1) Qualifying equipment or services, incentive amounts and other terms and conditions will be listed on the Idaho energy efficiency program section of the Company website, and are available to customers without online access upon request. Program changes may be made by the Company with at least 45 days advanced notice. Such changes will be prominently displayed on the Idaho energy efficiency program section of the Company website and include a minimum 45 days for processing prior offers.
- (2) Company may elect to offer EEM incentives through different channels and at different points in the sales process other than individual Energy Efficiency Incentive Agreement(s) prior to EEM purchase. The differences will depend on EEM and will be consistent for all EEMs of similar type.
- (3) Incentives may be offered year-round or for selected time periods.
- (4) Equipment or services receiving an incentive under this program are not eligible for incentives under other Company programs.
- (5) Company may offer payment as described in the Idaho energy efficiency program section of the Company website to design team members to encourage early initial Company consultation on Owner/Customer design and plans for New Construction/Major Renovation.
- (6) Company will employ a variety of quality assurance techniques during the delivery of the program. They will differ by EEM and may include pre- and post- installation inspections, phone surveys, and confirmation of Owner/Customer and equipment eligibility.
- (7) Company may verify or evaluate the energy savings of installed EEMs. This verification may include a telephone survey, site visit, review of facility operation characteristics, and pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.

ELECTRIC SERVICE REGULATIONS Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Electric Service Regulations of the Company on file with and approved by the Idaho Public Utility Commission, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

Submitted Under Case No. PAC-E-12-10

ISSUED: May 15, 2012

EFFECTIVE: July 14, 2012



I.P.U.C. No. 1

First Revision of Sheet No. 125.1
Canceling Original Sheet No. 125.1

ROCKY MOUNTAIN POWER

ELECTRIC SERVICE SCHEDULE NO. 125

STATE OF IDAHO

Energy FinAnswer

PURPOSE: Service under this schedule is intended to maximize the efficient utilization of the electricity requirements of new and existing loads in Commercial and Industrial Facilities by promoting the installation of Energy Efficiency Measures.

APPLICABLE: To service under the Company's General Service Schedules 6, 6A, 8, 9, 12, 19, 23, 23A, 24, 35 and 35A in all territory served by the Company in the State of Idaho. This Schedule is not applicable to existing Commercial Buildings under 20,000 square feet. This schedule is applicable to dairy barns served on the Company's residential rate schedules. Square footage is the total Building or Facility area served by the Company's meter(s).

DEFINITIONS:

Annual kWh Savings: The annual kilowatt-hour (kWh) savings resulting from installation of the Energy Efficiency Measures, as estimated by Company using engineering analysis.

Average Monthly kW Savings: The Average Monthly kilowatt (kW) savings resulting from the installation of Energy Efficiency Measures as estimated by Company using engineering analysis as described below:

Average Monthly kW Savings = (baseline average monthly kW - proposed average monthly kW), where;

⇒ Average monthly kW = sum of the 12 Monthly Maximum kW/12, where;

⇒ Monthly Maximum kW = highest of all 15 minute average kW (as determined below).

⇒ 15 minute average kW = sum of kWh used over 0.25 hrs/0.25 hrs

(Continued)

Submitted Under Advice No. 08-03

ISSUED: May 15, 2008

EFFECTIVE: May 1, 2008

I.P.U.C. No.1

Original Sheet No 125.2

ELECTRIC SERVICE SCHEDULE NO 125 – Continued

DEFINITIONS: (continued)

Baseline Level:

Baseline Adjustments: Company may adjust baseline electric energy consumption and costs during engineering analysis to reflect any of the following: energy codes, standard practice, changes in capacity, changes in production or facility use and equipment at the end of its useful life. For existing fixtures, baseline wattages for all fluorescent lighting Energy Efficiency Measures in all facilities shall be the lesser of existing equipment or the energy efficiency magnetic ballast and energy savings lamp combination.

Commercial Building: A structure that is served by Company and meets the applicability requirements of this tariff at the time an Energy Efficiency Incentive Agreement is executed which does not meet the definition of an Industrial Facility.

Commissioning: The process of verifying and documenting that the performance of electric energy using systems meets the design intent and Owner's operational requirement.

Customer: Any party who has applied for, been accepted and receives service at the real property, or is the electricity user at the real property.

Energy Efficiency Incentive: Payment of money made by Company to Owner or Customer for installation of an Energy Efficiency Project pursuant to an executed Energy Efficiency Incentive Agreement.

Energy Efficiency Incentive Agreement: An agreement between Owner or Customer and Company providing for Company to furnish Energy Efficiency Incentive with respect to an Energy Efficiency Project pursuant to this tariff Schedule.

(Continued)

ELECTRIC SERVICE SCHEDULE NO 125 – Continued

DEFINITIONS: (continued)

Energy Efficiency Measure (EEM): Permanently installed measure specified in an Energy Efficiency Incentive Agreement which can improve the efficiency of the Customer's electric energy use. EEMs designed to primarily reduce Average Monthly kW must also improve the electric energy efficiency to be eligible for Energy Efficiency Incentives.

Energy Efficiency Measure (EEM) Cost:

New construction: EEM Cost is the total installed cost of energy efficiency equipment or system minus the cost of the code compliance/common practice equipment or system.

Major renovation: EEM Cost is the total installed cost of the energy efficient equipment or system minus the cost of the code compliance/common practice equipment or system.

Retrofit: EEM Cost is the total installed cost of the energy efficiency equipment or modification.

In the case of new construction, major renovation and retrofits, EEM Costs shall mean the Owner or Customer's reasonable costs incurred (net of any discounts, rebates or incentives other than Energy Efficiency Incentives from the Company, or other consideration that reduces the final actual EEM Cost incurred by the Owner or Customer) to purchase and install EEMs at the Owner or Customer's facility. If the Owner or Customer installs the EEM then the cost of installation shall be equal to the Owner's or Customer's actual labor costs for such installation.

Energy Efficiency Project: One or more EEM(s) covered by one Energy Efficiency Incentive Agreement. Annual kWh and Average Monthly kW savings for an Energy Efficiency Project shall be the sum of the individual EEM values.

Energy Efficiency Project Cost: Energy Efficiency Project Cost shall be the sum of the individual EEM costs.

Industrial Facility: Buildings and process equipment associated with manufacturing.

(Continued)

I.P.U.C. No. 1

Original Sheet No. 125.4

ELECTRIC SERVICE SCHEDULE NO. 125 – Continued

DEFINITIONS: (continued)

Mixed Use: Buildings served by a residential rate schedule and a rate schedule listed under **Applicable** shall be eligible for services under this schedule provided the Energy Efficiency Project meets the definition of New Construction or Major Renovation.

New Construction: A newly constructed facility or newly constructed square footage added to an existing facility.

Major Renovation: A change in facility use type or where the existing system will not meet owner/customer projected requirements within existing square footage.

Owner: The person who has both legal and beneficial title to the real property specified in an Energy Efficiency Incentive Agreement who is the mortgagor under a duly recorded mortgage or the grantor under a duly recorded deed of trust or a purchaser under a duly recorded agreement with respect to such real property.

Retrofit: Changes, modifications or additions to systems or equipment in existing facility square footage.

Supplemental Services Agreement: An agreement between Owner or Customer and Company providing for Company to furnish Supplemental Services with respect to Supplemental Services section of this Tariff Schedule.

INCENTIVES FOR ENERGY EFFICIENCY PROJECTS:

Energy Efficiency Incentives: Energy Efficiency Incentives made by the Company for installation of EEMs pursuant to an Energy Efficiency Incentive Agreement shall be the lesser of the sum of (a) and (b) **OR** (c):

- (a) \$0.12/kWh for the Energy Efficiency Project Annual kWh savings as determined using Company provided or approved engineering analysis;
- (b) \$50/kW for Energy Efficiency Project Average Monthly kW savings determined using Company provided or approved engineering analysis.
- (c) 50% of the Energy Efficiency Project Cost as determined by the Company.

(Continued)

I.P.U.C. No. 1

Original Sheet No. 125.5

ELECTRIC SERVICE SCHEDULE NO. 125 – Continued
INCENTIVES FOR ENERGY EFFICIENCY PROJECTS (continued)

Energy Efficiency Projects are eligible for Energy Efficiency Incentives per Table 1 below.

Table 1

Program track	Design Assistance	Standard	Standard	Standard
Project Scope	Comprehensive	System	System	System
Type	New Construction/ Major renovation	New Construction/ Major renovation	New Construction/ Major renovation	Retrofit
Energy code applies	Yes	Yes	No	No
Energy savings threshold	Must exceed code by 10% - whole building electric basis	Qualifying equipment must exceed code	none	none
Owner/Customer Energy Efficiency Incentive caps applied to the Energy Efficiency Project				
50 % of project cost cap	No	Yes	Yes	Yes
1 year simple payback cap	No	Yes	Yes	Yes
Lighting savings cap	75%	50%	50%	50%
Design team incentives				
Honorarium	Yes	Yes	Not available	Not available
Design Incentive	Based on project size	Not available	Not available	Not available

(Continued)

Submitted Under Case No. PAC-E-08-01

ISSUED: February 14, 2008

EFFECTIVE: May 1, 2008

I.P.U.C. No. 1

Original Sheet No. 125.6

ELECTRIC SERVICE SCHEDULE NO. 125 – Continued

INCENTIVES FOR ENERGY EFFICIENCY PROJECTS: (continued)

All proposed Energy Efficiency Measure costs are subject to Company review and approval prior to offering an Energy Efficiency Incentive Agreement. All final Energy Efficiency Measure costs are subject to Company review and approval prior to paying an Energy Efficiency Incentive per the terms of an Energy Efficiency Incentive Agreement. Company review and approval of Energy Efficiency Measure costs may require additional documentation from the Customer or Owner.

For the purposes of calculating maximum annual electric savings resulting from lighting, electric savings resulting from lighting interaction with mechanical equipment and from lighting controls will be considered to be lighting savings.

The ten percent whole building energy savings threshold shall be calculated as follows: The Energy Efficiency Project must reduce the proposed electric energy consumption by at least 10% when compared to the baseline level of whole building electric energy consumption that would have resulted under the applicable Idaho energy code. The baseline and proposed building design shall be modeled using the methodology defined in Informative Appendix G to ASHRAE 90.1 2004 (or successor revision) using values from the applicable Idaho energy codes. The date of the building permit application shall establish the applicable version of the code.

The Customer or Owner may receive only one financial incentive from the Company per EEM. Financial incentives include Energy Efficiency Incentive payments.

Design team payments are available per Table 1 and the terms posted on the Idaho energy efficiency program section of the Company web site.

(Continued)

I.P.U.C. No. 1

Original Sheet No. 125.7

ELECTRIC SERVICE SCHEDULE NO. 125 – Continued

PROVISIONS OF SERVICE:

(1) Energy Analysis

Company shall meet with Customer or Owner and any design team and may perform an initial site visit/plans review to determine what EEMs may be appropriate for an energy analysis.

(2) Supplemental Services

Company may offer Supplemental Services beyond those described elsewhere in this Tariff Schedule through a Supplemental Services Agreement. Supplemental services shall include, but are not limited to: detailed design, life cycle costs calculations or compliance documentation for green or high performance building standards. Company will negotiate the amount and terms of the supplemental services on a project specific basis and may require any or all of the following: installation of EEMs delivering a certain amount of annual kWh savings, offset of a portion of the available incentive or direct reimbursement of a portion (up to 100%) of the direct Company costs for the service provided.

(3) EEM Inspection

Company will inspect any EEMs which are funded by or installed under this program. Satisfactory inspection by Company will be required prior to receiving Energy Efficiency Incentives specified in the Energy Efficiency Incentive Agreement.

(4) EEM Commissioning

Company will require that EEMs as specified in the Energy Efficiency Incentive Agreement be commissioned prior to receiving Energy Efficiency Incentives specified in the Energy Efficiency Incentive Agreement.

(4a) Commissioning Opt-Out: Required EEM Commissioning may be omitted with the following adjustments. Annual kWh savings, Average Monthly kW savings and eligible EEM Costs will all be reduced by 20% and an Energy Efficiency Incentive calculated using the provisions specified under Incentives for Energy Efficiency Projects. EEMs where the Owner or Customer has “opted-out” of EEM Commissioning and are later commissioned are not eligible for an additional Energy Efficiency Incentive after the Energy Efficiency Project Incentive is paid.

(Continued)

I.P.U.C. No. 1

Original Sheet No. 125.8

ELECTRIC SERVICE SCHEDULE NO. 125 – Continued**PROVISIONS OF SERVICE: (continued)****(5) Measure Performance Verification/Evaluation**

Company may verify or evaluate the energy savings of installed Energy Efficiency Measures specified in the Energy Efficiency Incentive Agreement. This verification may include a telephone survey, site visit, review of plant operation characteristics, and pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.

(6) Minimum Equipment Efficiency

For Retrofit Energy Efficiency Projects, EEMs must meet minimum equipment efficiency levels and equipment eligibility requirements in Schedule 115 to be eligible for incentives available under this Schedule.

(7) Energy Efficiency Incentives will not be made available to induce fuel switching by Owner.**(8) Design team incentives: Company may offer incentives to a design team member with current professional certification including architects and engineers. Incentives are available per Table 1 in this schedule and include honorariums and design incentives.**

Honorariums are designed to encourage early initial Company consultation on Owner/customer's design and plans. Honorariums will be equally available to all professionally certified architects and engineers for Idaho projects within Company's territory and will be limited to one honorarium per project.

Design incentives will be offered to all professionally certified architects and engineers for Idaho projects within Company's territory. Payment of incentives to the design team will require final construction documents include an efficient design meeting company requirements. Incentives will be based on the square footage of the project and limited to one per project.

(Continued)

I.P.U.C. No. 1

Original Sheet No. 125.9

ELECTRIC SERVICE SCHEDULE NO. 125 – Continued

PROVISIONS OF SERVICE: (continued)

Additional conditions for design team incentives will be available on the Idaho energy efficiency program section of the Company's web site and may be changed with 45 days notice posted on the web site.

ELECTRIC SERVICE REGULATIONS: Service under this Schedule is subject to the General Rules and Regulations contained in the tariff of which this Schedule is a part, and to those prescribed by regulatory authorities.

CANCELLED

Submitted Under Case No. PAC-E-08-01

ISSUED: February 14, 2008

EFFECTIVE: May 1, 2008

I.P.U.C. No. 1

First Revision of Sheet No. 155.1
Canceling Original Sheet No. 155.1

ROCKY MOUNTAIN POWER

AGRICULTURAL ENERGY SERVICES SCHEDULE NO. 155

STATE OF IDAHO

Optional for Qualifying Customers

PURPOSE: Service under this Schedule is intended to maximize the efficient utilization of the electricity requirements of new and existing loads in agricultural irrigation systems and irrigation district pumping systems by promoting electric energy-efficient irrigation practices and the installation of Energy Efficiency Measures.

APPLICABLE: To service under the Company's Irrigation and Soil Drainage Pumping Power Service Schedule 10, and to any customer who qualifies as a "Farm Load" under the Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501 and receives electric service on a retail schedule in all territory served by the Company in the State of Idaho.

DEFINITIONS:

Annual kWh Savings: The annual kilowatt-hour (kWh) savings resulting from installation of the Energy Efficiency Measures or improved equipment operation, as estimated by the Program Administrator or Company.

Average Monthly On Peak kW Savings: The Average Monthly On Peak kilowatt (kW) savings resulting from the installation of Energy Efficiency Measures or improved equipment operation as estimated by Program Administrator or Company using engineering analysis as described below:

Average Monthly On Peak kW Savings = (baseline average monthly On Peak kW - proposed average monthly On Peak kW), where;

⇒ Average Monthly On Peak kW = sum of the 12 Monthly Maximum On Peak kW/12, where;

(Continued)

Submitted Under Case No. PAC-E-08-01

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EFFECTIVE: May 1, 2008

AGRICULTURAL ENERGY SERVICES SCHEDULE NO. 155 (Continued)

DEFINITIONS: (Continued)

⇒ Monthly Maximum On Peak kW = highest of all 15 minute average kW (as determined below) for On Peak hours. On Peak hours are those hours specified in the electric service schedule under which the customer receives electric service.

⇒ 15 minute average kW = sum of kWh used over 0.25 hrs/0.25 hrs

Baseline Adjustments: Program Administrator or Company may adjust baseline electric energy consumption and costs during engineering analysis to reflect any of the following: standard practice, changes in capacity, changes in production or system use and equipment at the end of its useful life.

Customer: Any party who has applied for, been accepted and receives service at the real property, is the owner of the real property, or is the electricity user at the real property.

Energy Efficiency Incentive: Payment of money made by Program Administrator or Company to Customer for installation of Energy Efficiency Measures pursuant to an executed Energy Efficiency Incentive Agreement or approved Application.

Energy Efficiency Incentive Agreement: An agreement between Customer and Program Administrator or Company providing for Program Administrator or Company to furnish Energy Efficiency Incentive with respect to Energy Efficiency Measures pursuant to this tariff Schedule.

Energy Efficiency Incentive Application: An application provided by the Program Administrator or Company, completed by the Customer and approved by the Program Administrator or Company requesting the Program Administrator or Company furnish Energy Efficiency Incentives with respect to Energy Efficiency Measures pursuant to this Schedule.

Energy Efficiency Measure (EEM): Permanently installed measure specified in an Energy Efficiency Incentive Agreement or Application which can improve the efficiency of the Customer's electric energy use.

(Continued)

AGRICULTURAL ENERGY SERVICES SCHEDULE NO. 155 (Continued)

DEFINITIONS: (Continued)

Energy Efficiency Project: One or more EEM(s) covered by one Energy Efficiency Incentive Agreement or Application .

Energy Efficiency Measure (EEM) Cost:

New Construction: EEM Cost is the total installed cost of the energy efficient equipment or system minus the cost of the required/common practice equipment or system.

Major System Upgrades: EEM Cost is the total installed cost of the energy efficient equipment or system minus the cost of the required/common practice equipment or system.

Retrofit: EEM Cost is the total installed cost of the energy efficient equipment or modification.

In the case of New Construction, Major System Upgrades and Retrofits, EEM Costs shall mean the Customer's reasonable costs incurred (net of any discounts, rebates or incentives other than Energy Efficiency Incentives available under this Schedule or United States Department of Agriculture (USDA) Environmental Quality Incentives Program (EQIP) incentives, or other consideration that reduces the final actual EEM Cost incurred by the Customer) to purchase and install EEMs at the Customer's facility. If the Customer installs the EEM, then the cost of installation shall be equal to the Customer's reasonable and realistic actual labor costs for such installation.

New Construction: New irrigation piping, pumping, or system to provide irrigation for existing irrigated acreage or loads.

Major System Upgrades: Changes, modifications or additions to existing irrigation systems or equipment that involve substantial removal and replacement with new systems or equipment where such changes, modifications or additions are required to replace equipment at the end of its useful life, add capacity or change the utilization of the acreage or loads.

Program Administrator: Qualified person or entity hired by the Company to administer this Schedule.

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I.P.U.C. No. 1

First Revision of Sheet No. 155.4
Canceling Original Sheet No. 155.4

AGRICULTURAL ENERGY SERVICES SCHEDULE NO. 155 (Continued)

DEFINITIONS: (Continued)

Retrofit: Changes, modifications or additions to systems or equipment serving existing acreage or loads.

INCENTIVES FOR EEMS:

Energy Efficiency Incentives: Program Administrator or Company shall establish procedures and requirements for providing Energy Efficiency Incentives to Customers which shall be posted on the Company web site. Energy Efficiency Incentives include amounts available according to the energy, demand and cost formula listed below. All proposed Energy Efficiency Projects are subject to Program Administrator or Company approval prior to offering an Energy Efficiency Incentive Agreement or Application. Program Administrator or Company will establish Energy Efficiency Project approval criteria and post the criteria on the Company web site.

Energy Efficiency Incentives made available for installation of EEMs pursuant to an Energy Efficiency Incentive Agreement or Application shall be the **lesser** of the sum of (a) and (b) **OR** (c):

- (a) \$0.12 /kWh for the Annual kWh savings as determined using Program Administrator or Company provided or approved engineering analysis;
- (b) \$50/kW for Average Monthly On Peak kW savings determined using Program Administrator or Company provided or approved engineering analysis.
- (c) 50% of the EEM Cost as determined by the Program Administrator or Company.

(Continued)

AGRICULTURAL ENERGY SERVICES SCHEDULE NO. 155 (Continued)

INCENTIVES FOR EEMS: (Continued)

Energy Efficiency Incentives may be adjusted such that Customer does not receive more than 100% of EEM Costs in total incentives including incentives available under this Schedule and EQIP incentives.

All proposed EEM Costs are subject to Program Administrator or Company review and approval prior to offering an Energy Efficiency Incentive Agreement or approving an Application. All final EEM Costs are subject to Program Administrator or Company review and approval prior to paying an Energy Efficiency Incentive per the terms of an Energy Efficiency Incentive Agreement or approved Application. Program Administrator or Company review and approval of EEM Costs may require additional documentation from the Customer.

The Customer may receive only one Energy Efficiency Incentive under this Schedule per EEM.

PROVISIONS OF SERVICE

(1) Energy Analysis

Program Administrator or Company shall meet with Customer and any design team and may perform an initial site visit/plans review to determine what EEMs may be appropriate for an energy analysis. The energy analysis may include a visual pump check, water management consultation, pump testing, and/or irrigation/pump system analysis.

At the conclusion of the visual pump check and water management consultation, the Customer may be asked to sign an approval to proceed to the next step in the program and to commit to implement operational improvements identified in the water management consultation. If Customer signs the approval, Customer will receive an irrigation/pump system analysis, an incentive offer if potential upgrades are identified, and post-installation testing of installed system.

(Continued)

I.P.U.C. No. 1

**First Revision of Sheet No. 155.6
Canceling Original Sheet No. 155.6**

AGRICULTURAL ENERGY SERVICES SCHEDULE NO. 155 (Continued)

PROVISIONS OF SERVICE: (Continued)

- (2) **EEM Inspection**
Program Administrator or Company may inspect any EEMs which are funded by or installed under this program. Satisfactory inspection by Program Administrator or Company will be required prior to receiving Energy Efficiency Incentives specified in the Energy Efficiency Incentive Agreement or approved Application.
- (3) **Measure Performance Verification/Evaluation**
Program Administrator and/or Company may verify or evaluate the energy savings of installed Energy Efficiency Measures specified in the Energy Efficiency Incentive Agreement or approved Application. This verification may include a telephone survey, site visit, review of system operating characteristics, and pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.
- (4) Energy Efficiency Incentives will not be made available to induce fuel switching by Customer.

ELECTRIC SERVICE REGULATIONS Service under this Schedule is subject to the General Rules and Regulations contained in the tariff of which this Schedule is a part, and to those prescribed by regulatory authorities.

Submitted Under Case No. PAC-E-13-10

ISSUED: May 24, 2013

EFFECTIVE: August 15, 2013

Case No. PAC-E-14-08
Exhibit No. 5
Witness: Kathryn C. Hymas

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Testimony of Kathryn C. Hymas
Explanation of Typical/Prescriptive Measure Changes

August 2014

Exhibit 5

EXPLANATION OF TYPICAL/PRESCRIPTIVE MEASURE CHANGES

Lighting Incentives

Table 1 highlights the proposed lighting measure changes, including modifications to align with changes in federal lighting standards.

Table 1
Retrofit Lighting Changes

Measure	Change	Reason for Change
Linear Fluorescent, CEE T8	Adjust measure category name to be "CEE T8"	With the removal of the Standard T8 incentive, CEE T8 high performance lamp becomes the base-level incentive offering for T8 fixtures To encourage installation of lower wattage CEE T8, a higher incentive will be offered for fixtures using CEE T8 Reduced Wattage lamps.
Linear Fluorescent, T8, Relamp	Increase the incentive to \$1.00 per lamp.	The baseline shift for linear fluorescent has taken place in part due to the prevalence of standard T8 lamps in the market. This prevalence is also a large opportunity for additional kWh savings by relamping to a lower wattage T8 Relamp incentive is targeting percentage of an elective lamp upgrade
Linear Fluorescent, T8, High Bay	Tier the high bay incentive based on lamp count per fixture.	Recent cost analysis shows that the cost per lamp for a high-bay fixture decreases as the lamp count increases. The tiered incentive offers the appropriate incentive based on incremental costs.
Linear Fluorescent, T5, Relamp	Increase the incentive to \$1.00 per lamp.	This increase is for consistent relamp messaging regardless of T8 or T5.
Linear Fluorescent, T5, High Bay	Tier the high bay incentive based on lamp count per fixture.	Recent cost analysis shows that the cost per lamp for a high-bay fixture decreases as the lamp count increases. The tiered incentive offers the appropriate incentive based on incremental costs.
Compact Fluorescent Lamp – screw-in lamp	Remove measure from table.	Measure was sunset from the program effective January 1, 2014.
Induction Fixture	Reduce the incentive amount to \$75/fixture.	The reduction in incentive is in response to reduced market costs.

Other LED	Group all LED categories (except integral screw-in and recessed downlight) into a single category and offer incentives at a rate of \$0.15 per kWh saved.	The LED category is ever evolving. The technology is expanding in its uses and application. Removing defined categories and specific incentives per fixture enables the incentive to evolve with the technology and market and maintain a cost-effective result.
Custom	Increase incentive to \$0.15/kWh	The incentive rate is aligned with the custom incentive rate of the wattsmart Business program.
Daylighting Control	Clarify eligibility requirements.	Adjust eligibility requirements to include interior fixtures with drivers (i.e. LEDs), and require at least 50% reduction in output of connected fixtures.
Occupancy Control	Define the incentive rate per watt controlled instead of per sensor	Incentives based on controlled wattage encourage controlling more watts, rather than installing more sensors.
Daylighting Control	Define the incentive rate per watt controlled instead of per sensor	
Advance Daylighting Control	Define the incentive rate per watt controlled instead of per sensor	
Dimming Ballast	Remove the measure.	The dimming ballast is an inherent part of the daylighting control measure. The incentive for daylighting control was established with consideration of the additional costs for dimming ballasts.

Table 2 highlights the proposed changes to new construction and major renovation lighting measures.

Table 2
New Construction/Major Renovation Lighting

Measure	Change	Reason for Change
Exterior Lighting, LED	Revise the exterior LED categories to include new types of fixtures and defined wattage ranges.	The new categories are aligned with the qualified list updates, current market costs, and enable most exterior LED lighting applications to be eligible for incentives.
Exterior Lighting, Lighting Control	Change incentive to be based on per controlled watt	Incentives based on wattage controlled encourage controlling more watts, rather than installing more sensors.

Table 3 summarizes modifications for existing HVAC, building envelope, food service, appliances and office energy efficiency measures included in the program.

Table 3
Summary of Proposed Changes to Existing HVAC, Building Envelope, Food Service, Appliances and Office Energy Efficiency Measures

Measure Category	Measures	
HVAC Other HVAC Equipment and Controls	Unitary commercial air conditioners and heat pumps	Update deemed costs to align with market data.
	PTAC/PTHP Occupancy Based Controller	Revise eligibility to include door-key occupancy sensors in addition to infrared/ultrasonic sensors.
	Portable Classroom HVAC Control	Revise eligibility to include occupancy based thermostat control in addition to 365/366 scheduling.
Food Service	Commercial Dishwasher	Update deemed savings/costs and incentive to align with ENERGY STAR specification update and current industry standard baseline. Remove eligibility requirement of electrically heated DHW, but require electric booster heater to increase program participation. Savings will vary based on DHW energy source.
	Refrigerator/Freezer	Discontinue offering incentives for solid door refrigerators/freezers. Very limited savings potential relative to industry standard baseline. Revise incentives for transparent door refrigerators/freezers based on updated cost data.
	Electric Insulated Holding Cabinet	Adjust incentives based on revised deemed costs/savings.
	Electric Combination Oven	Update deemed savings/costs and incentive to align with ENERGY STAR specification update (effective 1/1/2014). Add/define size category to account for large differences in incremental costs.
	Electric Convection Oven	Update deemed savings/costs and incentive to align with pending ENERGY STAR specification update (effective 1/1/2014).
	Electric Griddle	Discontinue offering incentives for ENERGY STAR Tier 1 electric griddles. Negligible incremental cost difference and small savings between standard and ENERGY STAR Tier 1 qualified products. Adjust eligibility requirements to ENERGY STAR Tier 2

		qualified models only. Update deemed costs/savings.
	Electric Steam Cooker	Tier 1 – Update deemed costs/savings and incentive. Tier 2 - Adjust eligibility requirements and deemed savings/costs and incentive to align with revised RTF data.
	Electric Commercial Fryer	Tier 2 - Adjust eligibility requirements and deemed savings/costs and incentive to align with revised RTF data.
	Air-Cooled Ice Machines	Update deemed savings/costs and incentive to align with ENERGY STAR specification update.
	LED Case Lighting	Update deemed savings and costs to align with revised RTF data.
	Residential Refrigerator (used in a Business)	Update eligibility/incentives and reported costs/savings to align with the Home Energy Savings program.
	Residential Dishwasher (used in a Business)	Remove commercial in alignment with recent Home Energy Savings program updates.
Appliances	Commercial Clothes Washer	Update incentives, deemed costs/savings to align with market data for ENERGY STAR qualified models. Remove incentives for CEE Tier 3 qualified models as CEE has suspended its commercial clothes washer specification.
	Residential Water Heater (Used in a Business)	Update eligibility/incentives and reported costs/savings to align with the Home Energy Savings program.
	Residential Clothes Washer (Used in a Business)	
Office	Network Power PC Management	Update deemed savings and costs to align with data from NWPCC 6 th Plan RTF since RTF measure is now limited to K-12 schools. Reduce incentive to \$5/pc. Update eligibility criteria to include only desktop computers for higher savings certainty.
	Smart Plug Strip	Update deemed savings and costs to align with revised data from RTF.

To further increase participation and the comprehensiveness of the program and streamline program administration, the Company is proposing to add new measures to existing measure categories, as detailed below in Table 4. In addition, there are new industrial/ag measures in subsequent tables.

Table 4
New Measures

Measure Category	Measure	Description
HVAC	Variable Refrigerant Flow (VRF) Heat Pump	Offer a prescriptive incentive for VRF systems, which are an increasingly requested HVAC option in small/medium commercial buildings. Align eligibility requirements with CEE high-efficiency HVAC specification and calculate savings based on building type, climate and size of system.
	Evaporative Pre-Cooling	Offer a prescriptive incentive (based on air conditioning equipment size) for equipment that pre-cools air before it reaches the air conditioner condenser coil.
Food Service	Anti-Sweat Heater Controls (Retrofit-Only)	Offer prescriptive incentives (per linear foot of refrigerated case) for anti-sweat heater controls installed in retrofit applications. Align deemed savings/costs with recently approved RTF UES data.
	Demand-Controlled Kitchen Ventilation (Retrofit-Only)	A simplified calculator tool will be utilized to estimate savings based on kitchen operating hours, climate, and HVAC system efficiency. Incentives offered on a \$/kWh saved basis.
	Residential Refrigerator/Freezer Recycling	Allow non-residential customers to participate in the residential refrigerator and freezer recycling program for qualifying residential refrigerators and freezers used in a business.

Table 5
Farm and Dairy

Measure Category	Description of Change	Reason for Change
Farm and Dairy	Revise the basis for determining incentives for the heat recovery measure.	The previous incentive for heat reclaim – using heat rejected from the milk refrigeration system to offset electric water heating – was calculated as \$220 per condenser kW. The revised approach uses a calculator to directly calculate energy savings from pounds of milk/day, temperature differences, and information about the refrigeration system. Incentive rate is aligned with the custom project rate, \$0.15/kWh annual savings up to 70% of project cost or one-year payback. This is a measure in the existing program and currently utilizes site specific calculations.
	Revise incentive rate for milk pre-cooler measure from the previous \$0.12/kWh plus \$50/kW to the new custom rate of \$0.15/kWh.	This revision brings the incentive rate for milk pre-coolers into alignment with the standard custom rate. This is a measure in the existing program and currently utilizes site specific calculations.
	Add new measure: variable frequency drives for fans in potato or onion storages.	Potato and onion storage fan VFDs have been eligible for custom incentives in the current programs. Key variable affecting energy consumption and available savings can be gathered. The measure is well suited to utilize a calculator to determine savings. Making potato/onion storage fan VFDs a listed measure enables rapid turnaround on the incentive process, low cost administration, and optimal participation by vendors and growers. The Regional Technical Forum (RTF) has maintained a Unit Energy Savings (UES) value (on a per horsepower basis) for this measure in the past.
	Apply project level caps (percent of project costs and one-year payback) to all Farm and Dairy measures.	Customer costs for Farm and Dairy measures vary. While incentives are set to be a portion of (but not exceed) the measure costs, having project cost and simple payback caps consistent with the custom project offer in the program aligns program delivery with design intent and simplifies marketing to customers and trade allies.

Table 6
Compressed Air Measures

Measure Category	Description of Change	Reason for Change
Compressed Air	Revise savings for zero loss condensate drain from 0.14590 kWh per hour of operation per year to 786.37 kWh/yr. Revise incentive from \$90 each to \$100 each.	Using average annual system runtime to determine Unit Energy Savings is a simpler approach for this small system measure than collecting runtime for each system to calculate system-specific savings. Experience over time with the program has led to an annual average runtime close to the Department of Energy estimated average. This runtime has been used to simplify the UES value. Measure cost has increased slightly, and available savings support a slight increase in incentive to help further increase participation.
	Revise savings for cycling refrigerated dryer from 0.00242 kWh per scfm per hour of operation per year to 12.73 kWh/scfm per year. Revise incentive from \$1.50/scfm to \$2.00/scfm. For projects where a new dryer is installed along with a new air compressor, use the Northwest Regional Compressed Air Tool to calculate dryer savings and pay the incentive at the custom incentive rate rather than using the Unit Energy Savings kWh and incentive value.	Same note as above regarding runtime and RTF Incentive slightly increased to encourage participation. Cycling dryers installed with a compressor may take advantage of the fact that the load profile for the specific installation has already been estimated. The Northwest Regional Compressed Air calculator can calculate actual dryer savings using the compressor load profile and can package the presentation of compressor and dryer economics into the same single sheet presentation for the decision maker. Hence the use of the custom approach for the dryer when purchased in conjunction with a compressor.
	Revise savings for receiver capacity addition measure from 0.00249 kWh per gallon per hour of operation per year to 13.10 kWh per gallon per year. Revise incentive from \$1.50 per gallon to \$3.00 per	Same note as above regarding runtime. Incentive has been increased to encourage participation.

	gallon of receiver capacity above the first 2 gallons/scfm of trim compressor capacity.	
	Revise savings for low pressure drop filter measure from 0.00129 kWh per scfm per hour of operation per year to 6.79 kWh per scfm per year. Revise incentive from \$0.80 per scfm to \$2.00 per scfm.	Same note as above regarding runtime. Incentive has been increased to encourage participation.
	Revise savings for outside air intake measure from 0.00931 kWh per hp per hour of operation per year to 48.97 kWh per hp per year. Incentive remains unchanged.	Same note as above regarding runtime.
	Remove the constraint on the VFD compressor measure that the system be comprised of only a single operating compressor (not counting backup capacity). Allow VFD compressors to be treated as listed measures as long as the compressor receiving the incentive is installed in a system with total capacity of 75 hp or less, not counting backup compressor(s) that do not normally run.	Clarifies program design intent to focus on smaller systems with identifiable key variables that affect energy consumption and savings. Second machines may be in place for back-up purposes and may not materially affect available energy savings. Eliminates confusion when a customer wishes to install VFD compressor in a system with a second fixed speed compressor that operates at times to keep up plant pressure and the total system is less than 75 hp in total capacity. Systems with multiple compressors can be handled through a combination of calculators and program staff engineering calculations outside of the calculator.

	<p>For the VFD compressor measure, remove the constraint that “compressor must not use inlet modulation when demand is below the minimum speed threshold of the VFD compressor.”</p>	<p>Aligns program eligibility with best available market information on how various manufacturers control a compressor when demand for compressed air in less than that delivered by the machine once the VFD has slowed to its minimum allowable speed. Some of these methods are more efficient than others, yet the net effect on savings is minimal given the amount of time system typically is in this operating mode. Removing the language broadens the equipment options for customers.</p>
	<p>Add compressed air end use reduction as a listed measure. Use the Northwest Regional Compressed Air Tool to estimate savings and pay at the custom rate.</p>	<p>Inefficient uses of compressed air are very common in industry. Where functionally equivalent alternatives are available, savings can be had by undertaking small projects to make a change in the system. Examples include replacing simple blowing applications with engineered nozzles, using electric pumps in place of air operated pumps, and adding isolation valves to close off a portion of a distribution system when not operating (saving on leak load). Compressed air savings in cfm may be estimated by program staff, and the Northwest Regional Compressed Air tool may then be used to estimate savings and incentives. This approach makes such small projects feasible to administer.</p>
	<p>Apply project level caps (percent of project costs and one-year payback) to all Compressed Air projects.</p>	<p>Customer costs for Compressed Air measures vary. While incentives are set to be a portion of (but not exceed) the measure costs, having project cost and simple payback caps consistent with the custom project offer in the program aligns program delivery with design intent and simplifies marketing to customers and trade allies.</p>

Table 7
Waste Water and Other Refrigeration

Measure Category	Description of change	Reason for Change
Other – Refrigeration and Wastewater	Add adaptive refrigeration control measure. Use calculator to estimate savings and pay at the custom rate of \$0.15/per kWh with project level caps (percent of project costs and one-year payback).	Adaptive refrigeration controllers replace conventional thermostat, defrost time clock and defrost termination controls in refrigerated spaces cooled by unitary systems. Projects are typically small, with savings ranging from 2,000 to 20,000 kWh per controller, depending on system size. Savings is readily determined using nameplate information and operating schedules. These opportunities are efficiently administered as a calculator-based listed measure.
	Add fast acting door measure. Use calculator to estimate savings and pay at the custom rate of \$0.15/per kWh with project level caps (percent of project costs and one-year payback).	Fast acting doors replace manually operated doors, automatic doors with long cycle times, strip curtains, or entryways with no door at all in refrigerated or conditioned space. Savings is highly situation specific. A calculator-based listed measure takes into account the details of each situation, while affording an efficient administrative approach.
	Add low power mixer measure. Use calculator to estimate savings and pay at the custom rate of \$0.15/per kWh with project level caps (percent of project costs and one-year payback).	Low power mixers, also called extended range circulators, take the place of high powered mixers or the practice of using aeration for mixing in wastewater treatment ponds. A calculator-based approach is an effective method of generating leads and administering project using the custom incentive rate and cap.

Case No. PAC-E-14-08
Exhibit No. 6
Witness: Kathryn C. Hymas

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Testimony of Kathryn C. Hymas

Enhanced Offer for Small Business Customers

August 2014

Exhibit 6

Enhanced offer for small business customers

In this application the Company is also requesting to add a targeted incentive offer to capture additional savings from the harder to reach small/medium business customer segment. The initial offer will be an enhanced retrofit lighting upgrade offering. There is high market potential for energy savings from lighting upgrades in the small/medium business customer segment as evidenced by:

- An analysis of past program participation which showed that 99% of small business customers (approximately 9,000 customers) have not participated in energy efficiency programs.
- The findings of the Company's 2013 DSM Potential Study which shows the largest savings potential of all measure categories continues to be in commercial lighting —37% of the achievable technical potential across five of six states¹ served by the Company. (The Cadmus Group, Inc., 2013).²

The small business offer is designed to overcome participation barriers for small/medium business customers, as identified by the Center for Energy and Environment³:

- Lack of awareness of energy-efficiency opportunities and relative benefits in both customer-owned and leased facilities.
- Lack of time and resources to investigate and implement energy efficiency improvements
- Limited access to capital for energy efficiency projects

Overview of the small business offer








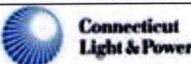
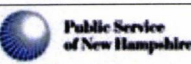


As proposed, the small business offer will align with a best-practice approach used by many other utilities (listed in Table 1, below) utilizing a pool of Company-approved and managed contractors to work directly with small/medium business customers to identify energy-efficiency upgrades, estimate savings and incentives, and install high-efficiency equipment. Participating customers utilizing an approved contractor will be eligible for an enhanced incentive offer targeted at 80% of the project cost. To reduce the customer's out-of-pocket expenses and minimize cash flow impacts, the customer can assign the incentive to the contractor who will then apply it as an up-front reduction to the overall project cost. Participating contractors will complete and submit the required incentive application and documentation to the Company for payment of the incentive amount that was assigned to them by the customer.

¹ Excludes Oregon

² The Cadmus Group, Inc. (2013). *Assessment of Long-Term, System-Wide Potential for Demand-Side and Other Supplemental Resources, 2013-2032 Volume I*. PacifiCorp.

³ Center for Energy and Environment. (n.d.). *One-Stop Efficiency Shop 2000-2007*. Minneapolis: Center for Energy and Environment.

Table 1 - Similar Offers from Other Utilities

Utility	Program Name	Customer Eligibility
 Pacific Gas and Electric Company	Right Lights	Small and Mid-Sized Business
	Express Solutions	Demand \leq 100 kW + schools
	Business Solutions Small Business Program	$<$ 145,000 kWh/yr
	Small Business Direct Install Lighting Program	\leq 350 kW
	Direct Install	Small and Mid-Sized Business
	Complete Energy Solutions	Up to 299 kW / mo
	Small Business Services program	\leq 300kW / month
	Small Business Energy Advantage	Avg peak demand 10 kW - 200 kW
	Small Business Energy Solutions	\leq 200 kW / month
	Smart Energy Savers	\leq 60 kW / mo
	Small Business Lighting	\leq 400 KW

In this application, the Company is requesting approval to consolidate all non-residential programs into the wattsmart Business program. The small business offer is proposed to be added as a component of the wattsmart Business program. The existing design/infrastructure and trade ally/contractor administration team will be utilized, linking customers with the program options and contractor resources that most appropriately address their needs. Customers not eligible to receive the small business offer remain eligible to participate in all other elements of wattsmart Business including the program's other lighting offers.

The Company has hired an administrator for the small business offer using a competitive RFP process. The administrator will identify, solicit, and approve contractors to participate in the delivery of the small business offer. Selection criteria will be based on business reputation, offered lighting retrofit costs, past program participation, geographic area served, and capability to pursue projects. Preference will be given to existing local Idaho contractor businesses operating successfully for the past 12 months. Approved contractors will be required to enter into an agreement with the Company indicating they will abide by the terms and conditions of this offer and will be provided with local sales, marketing, and program training. Contractor performance will be monitored closely to ensure high customer satisfaction, accurate project information, and cost-effective savings.

Table 2 – Small/Medium Business Barriers and Solutions

Barrier	Solution
Lack of awareness of energy-efficiency opportunities and relative benefits in both customer-owned and leased facilities.	Contractors identify upgrades and provide customers, owners and tenants with the output of a lighting tool summarizing the project economics with available incentives. Contractors explain energy and non-energy benefits.
Lack of time and resources to investigate and implement energy efficiency improvements	Contractors approved by the Company-hired administrator review existing lighting and provide customers with a proposal for upgraded lighting. Contractors provide completed paperwork for customer signature.
Limited access to capital for energy efficiency projects	Incentives are targeted to cover 80% of the implementation costs, significantly reducing the initial customer out-of-pocket expenses. Customers are expected to recoup their total out-of-pocket investment in the form of electric bill savings in as little as one year.

Customer Participation Process

The small business offer will be available to customers exclusively through approved contractors, according to the process outlined in

Figure 1 below. Outreach and sales efforts of the approved contractors will be the primary means by which customers will learn about the offer, but may be supplemented by Company-led marketing efforts.

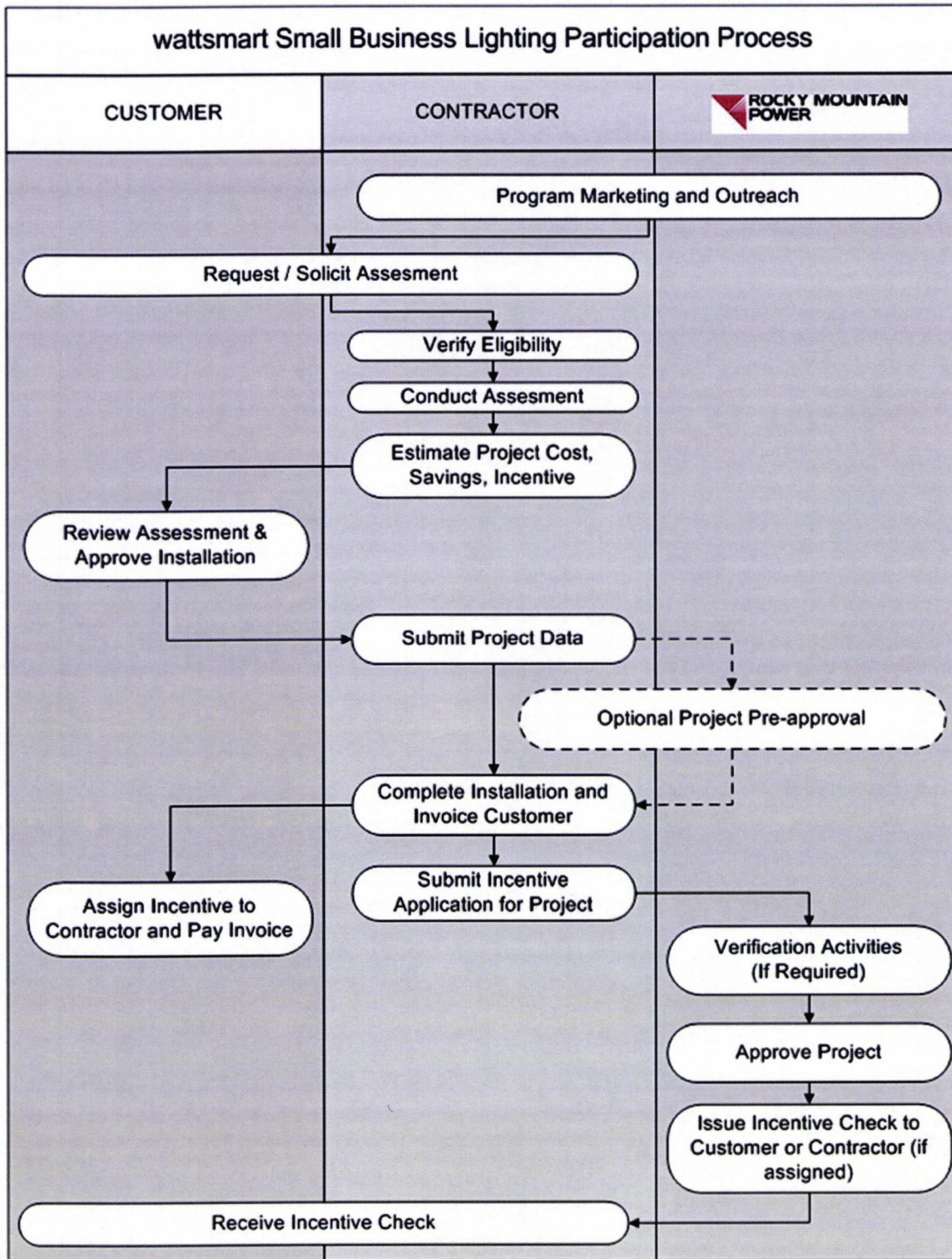
Once engaged, approved contractors will work with the customer to confirm eligibility, inventory existing equipment, recommend high-efficiency upgrades, estimate the overall project cost, identify energy/cost savings, and provide available incentive calculations. Incentives are targeted to cover 80% of the overall project cost and may be credited against the overall cost quote provided to the customer as part of the contractor bid.

The customer

- decides whether to proceed with the project
- decides which participating vendor to work with
- decides to assign the incentives to contractor (reflected as a credit on the contractor invoice to the customer) or to receive a cash incentive at project completion.
- schedules the installation date with the contractor, and
- pays the non-incentivized portion of the project cost directly to the contractor.

Upon completion and approval of the project, the incentive is paid according to the instructions in the customer's application (either paid directly to the contractor or paid to the customer).

Figure 1: Small Business Lighting Participation Process



Eligible Customers

To ensure the small business offer targets its intended audience, the company's small/medium business customers, eligibility will be limited as follows:

- Rate Schedule 23 & 23A – all customers on this rate schedule will be eligible

Additional eligibility criteria may be added, (e.g. square footage, operating hours, kWh usage) to align with savings targets, incentive budgets, and cost effectiveness requirements and will be posted on the Company website.

Qualifying Measures

Initially, the measure list will be focused on high-efficacy fluorescent lighting technologies, occupancy controls, and LED recessed downlights and exit signs that are frequently found in small/medium businesses, as shown in Table 3. Measures not included in the small business customer incentive table will be incentivized at the standard rates offered in the wattsmart Business program.

Table 3 - Enhanced Incentives for Small Businesses

Measure	Category	Eligibility Requirements
T8 Fluorescent	Retrofit (Lamp/Ballast)	4' CEE Qualified Reduced Wattage Lamp and CEE Qualified Ballast included on qualified ballast list
	Delamp	4' CEE Qualified Reduced Wattage or High Performance Lamp and CEE Qualified Ballast. Must remove one or more lamps. To delamp an existing fixture, the lamp and all corresponding sockets must be permanently disabled.
	T12 Conversion (Kit/Lamp/Ballast)	8' T12 to (2) 4' CEE Qualified Reduced Wattage or High Performance T8 Lamps and CEE Qualified Ballast.
	Relamp	Lamp wattage reduction ≥ 3 Watts, No ballast retrofit
	Replacement – High Bay (Fixture/Lamp/Ballast)	Fixture with less than six (6) lamps: 4' CEE Qualified High Performance Lamp. Must replace T12HO/VHO or HID Fixture with six (6) or more lamps: 4' CEE Qualified High Performance Lamp. Must replace T12HO/VHO, incandescent or HID
T5 Fluorescent	Replacement – T5 Standard (Fixture/Lamp/Ballast)	4' Nominal Lamp ≤ 28 Watts, Ballast Factor ≤ 1.0
	Relamp	Lamp wattage reduction ≥ 3 Watts, No ballast retrofit
	Replacement – High Bay (Fixture/Lamp/Ballast)	Fixture with less than six (6) lamps: Must replace T12HO/VHO, Incandescent or HID Fixture with six (6) or more lamps: Must replace T12HO/VHO or HID
LED	Replacement/Retrofit - Recessed Downlight (Fixture or Kit)	Must replace existing incandescent or fluorescent, LED must be listed on qualified equipment list
	Replacement - Exit Signs	Must replace incandescent or fluorescent
Lighting Control	Wall Occupancy Sensor Retrofit	PIR, Dual Tech
	Ceiling Occupancy Sensor Retrofit	PIR, Dual Tech

The Company will continue to review other possible qualifying measures that are found cost effective either at a program or individual project level. The Company will bring those measures forward to the Commission and into the offering as they are identified.

Incentive Structure

The Company is proposing to define the incentives for this offer on a measure-specific basis targeted to cover 80% of the customer cost. Incentives will initially be determined relative to market costs collected from the contractor application process used to select and approve contractors and will not exceed the maximum incentive values in Schedule 140. The incentive table will be posted on the Company's website.

Incentives will be explicitly defined in the agreement made with each contractor. When the customer has opted to assign the incentive payment to the contractor, contractors will be required to pass-through the full incentive amounts as an up-front discount off the cost quote provided to participating customers through the assignment of the incentives to the contractors by the customers.

Upon completion and approval of a project, the incentive will be paid by the Company directly to the contractor who was assigned the incentive or to the customer if the incentive was not assigned to the contractor. This approach significantly reduces the customer's out-of-pocket expenses, as detailed in the example project below.

Figure 2 – Example Project

<div> Project Specifics are from a past wattsmart Business retrofit project: <ul style="list-style-type: none"> Idaho schedule 23 customer in Shelley, IdahoEnergy Cost = \$0.08788 /kWh Demand Cost = \$0.00 /kW (42) 2-Lamp, 4' Premium T8 fixtures installed </div>	Total Project Cost	\$3,300
	Energy Savings (kWh/yr)	9,532
	Demand Savings (kW/month)	2.90
	Electric Cost Savings	\$838
	Enhanced Incentive (80%)	- \$2,640
	Net Customer Out-of-Pocket Cost	\$660
	Simple Payback (Pre-Incentive)	3.9 yrs
	Simple Payback (Post-Incentive)	0.8 yrs

The example shows the customer's out-of-pocket expenses reduced from \$3,300 to \$660 with the simple payback going from 3.9 to 0.8 years after incentives. Compare this to the same project receiving the typical wattsmart Business incentives where the customer's out-of-pocket expenses are \$1,650 with a simple payback of 2.0 years after incentives.

Tariff structure for small business incentives

Exhibit 4 includes the above Table 3 listing the qualifying measures. Although participants have the option to receive their incentive payment directly, the Company anticipates most will assign their incentive payment to the lighting contractor. The Company will have an agreement with lighting contractors that includes pricing levels. Contractors will be required to propose pricing that is consistent⁴ with their agreement with the Company.

⁴ Note contractors will have the flexibility to account for site specific variations in their proposed pricing to customers (e.g. include costs for rental of a lift for high ceiling applications, after hours installation, etc.)

It is important to have the capability to adjust incentive levels in response to changing market conditions. It is the Company's intent to make adjustments to the incentive table periodically to address market conditions for lighting (changes in material costs, product availability, and price competition), ensure the customer out-of-pocket expenses are approximately 20% of the overall project cost, and align with savings targets, incentive budgets, and cost effectiveness requirements.

When the Company needs to adjust the small business incentives, the Company will post a notice on its website announcing the coming changes. The notice will be posted at least 45 days prior to the changes taking effect. In no event will incentives exceed the not-to-exceed amounts listed in Schedule 140 without Commission approval.

Quality Assurance and Controls

A robust quality assurance regime is planned for the small business offer, focused on the following:

Contractors – Contractors will be evaluated and selected no less than annually to deliver the small business offer to customers. Each selected contractor will be required to sign an agreement with the Company outlining quality, customer service, and participation requirements. Contractor performance will be regularly monitored by the Company-hired administrator through project application review, customer satisfaction surveys, on-site inspections, office visits, and ongoing communications. Contractors not meeting or exceeding quality, customer service, project, invoicing, and other requirements will be subject to removal from participation in the small business offer.

Project Review – Contractors will be conducting a site-specific assessment and calculating incentives using the Company-provided standard calculation workbook. Each project application will be examined to validate customer eligibility, review submitted costs, and confirm adherence to program policies and procedures before issuing an incentive check. Contractors are expected to provide customer pricing consistent with costs submitted during the selection process. Project costs will be closely monitored and deviations from the submitted costs will be investigated.

Installation Verification - On-site inspections and customer phone calls will be performed on a sample of completed projects to confirm contractor-submitted charges, verify installation quality and reported accuracy, and solicit customer feedback of the participation process.

Projected Costs and Energy Savings

The Company has set a 2014 savings goal of 133,300 kWh⁵. Through an analysis of the eligible customer base and the savings potential from the qualifying measures, a reasonable average savings of 3,500 - 6,800 kWh is expected per project coming from 20-40 completed projects in the remaining months of 2014.

Projected costs and savings for the first three years are provided in the cost effectiveness analysis in Exhibit 2.

⁵ Gross savings at the customer site (does not include a net-to-gross adjustment or line loss adjustment). Assumes a start date of 8/1/2014.